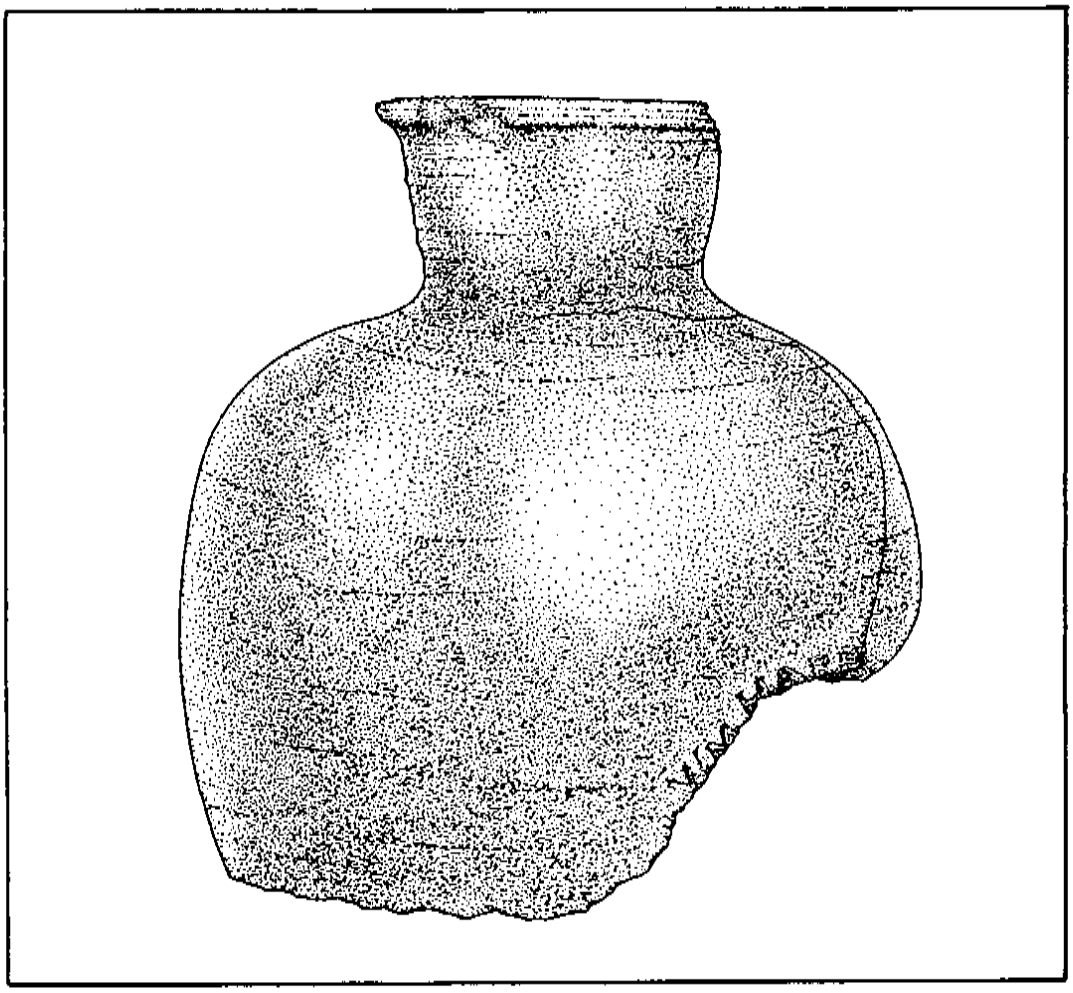
Final Archaeological Investigations of the Replacements of Bridges #17 and #18, on New Castle #221 (Beaver Valley Road), New Castle County, Delaware



by

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UNIVERSITY OF DELAWARE
Department of Anthropology
Center for Archaeological Research

Delaware Department of Transportation Archaeological Series No. 62

Delaware Department of Transportation

John T. Davis
DIRECTOR
Division of Highways
1988

U.S. Department of Transportation
Federal Highway Administration

FINAL ARCHAEOLOGICAL INVESTIGATIONS OF THE REPLACEMENTS OF BRIDGES #17 AND #18, ON NEW CASTLE #221 (BEAVER VALLEY ROAD), NEW CASTLE COUNTY, DELAWARE

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ABSTRACT

A Phase I and II archaeological survey of the project area for the proposed replacement of Bridges Nos. 17 and 18 on Beaver Valley Road, New Castle County, Delaware, identified the remains of three historic cultural resources dating from the early nineteenth to early twentieth centuries. No prehistoric cultural resources were identified. Archival research indicated that two of the structures, a store/post office (A. Chandler/Galbreth Site) and a blacksmith shop (J. Chandler/Highfield Site), were established in the first quarter of the nineteenth century by the Chandler family. The other structure identified, a tenant house (Sauber House Site) dates to this period. The Project Area was locally known as Chandler's Hollow in the nineteenth century and the businesses established by the Chandler brothers served a small milling and farming community. By the first decade of the twentieth century, however, the community had declined sharply due to changes in the regional economy and fluctuations in the flow of Beaver Creek. Documentary research focused on kinship and community interactions and how these influenced land use, employment, and tenancy patterns over time. None of the historic sites were determined to be eligible for listing in the National Register of Historic Places and no further work is recommended for any of the sites.

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INTRODUCTION

The purpose of this report is to describe the Phase I and II archaeological investigations of the project area for the proposed replacement of Bridges Nos. 17 and 18 on Road 221 (Beaver Valley Road). The project area is located in extreme northern New Castle County, Delaware (Figure 1), and includes approximately 560 feet of right-of-way (Figure 2). The fieldwork and report preparation took place between May 1986 and December 1986. The survey work was undertaken by the University of Delaware Center for Archaeological Research for the Delaware Department of Transportation and the Federal Highway Administration under Section 106 of the National Historic Preservation Act to evaluate the effects of the proposed replacement of Bridges Nos. 17 and 18 on significant, or potentially significant, cultural resources as defined by the National Register of Historic Places (36 CFR 60). The built environment of standing structures is not considered in this report.

Appreciation for their help, information, interest, and support is extended to all the residents of the Beaver Valley area. Special thanks and recognition are offered to the following people:

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FIGURE 1

Study Area Location

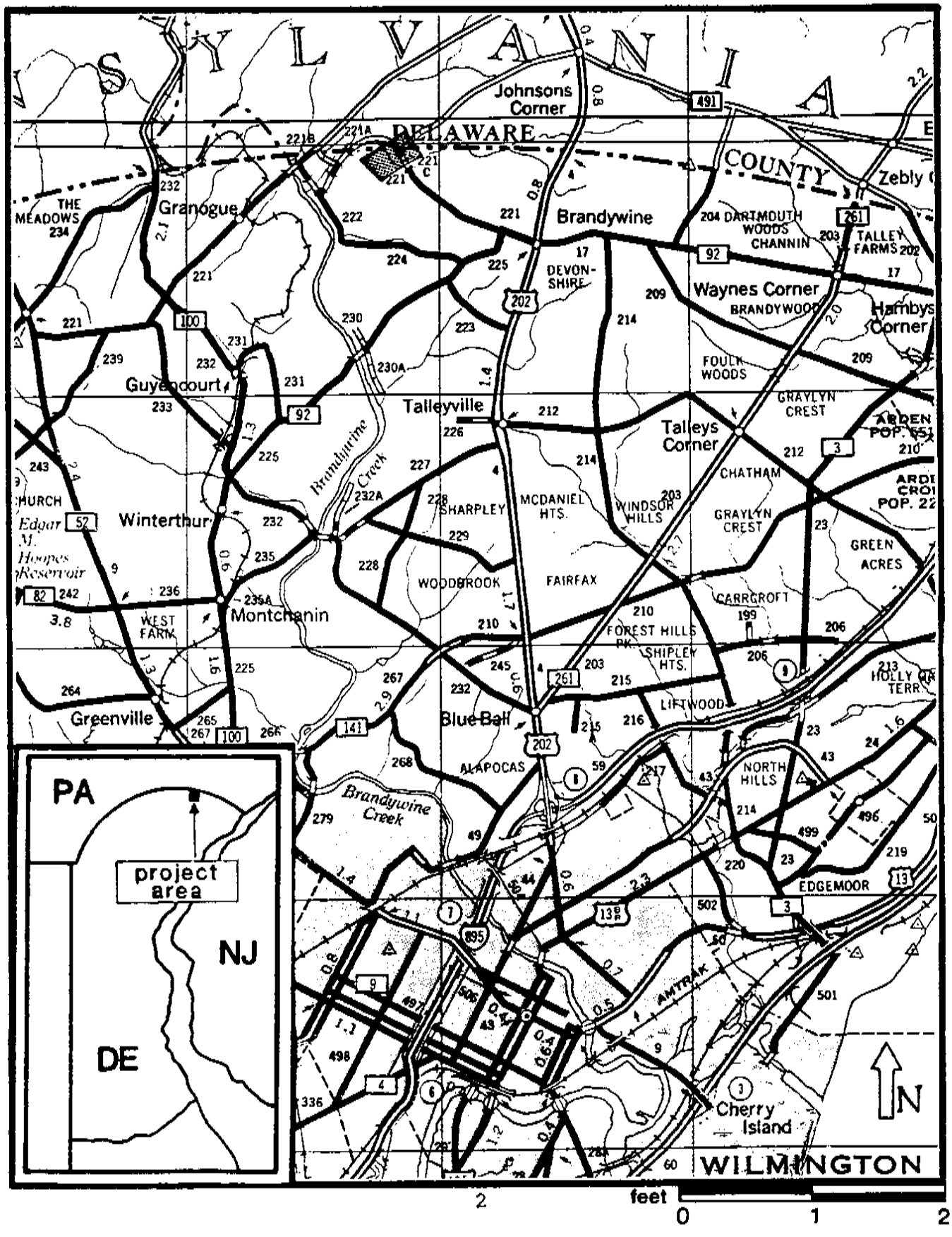
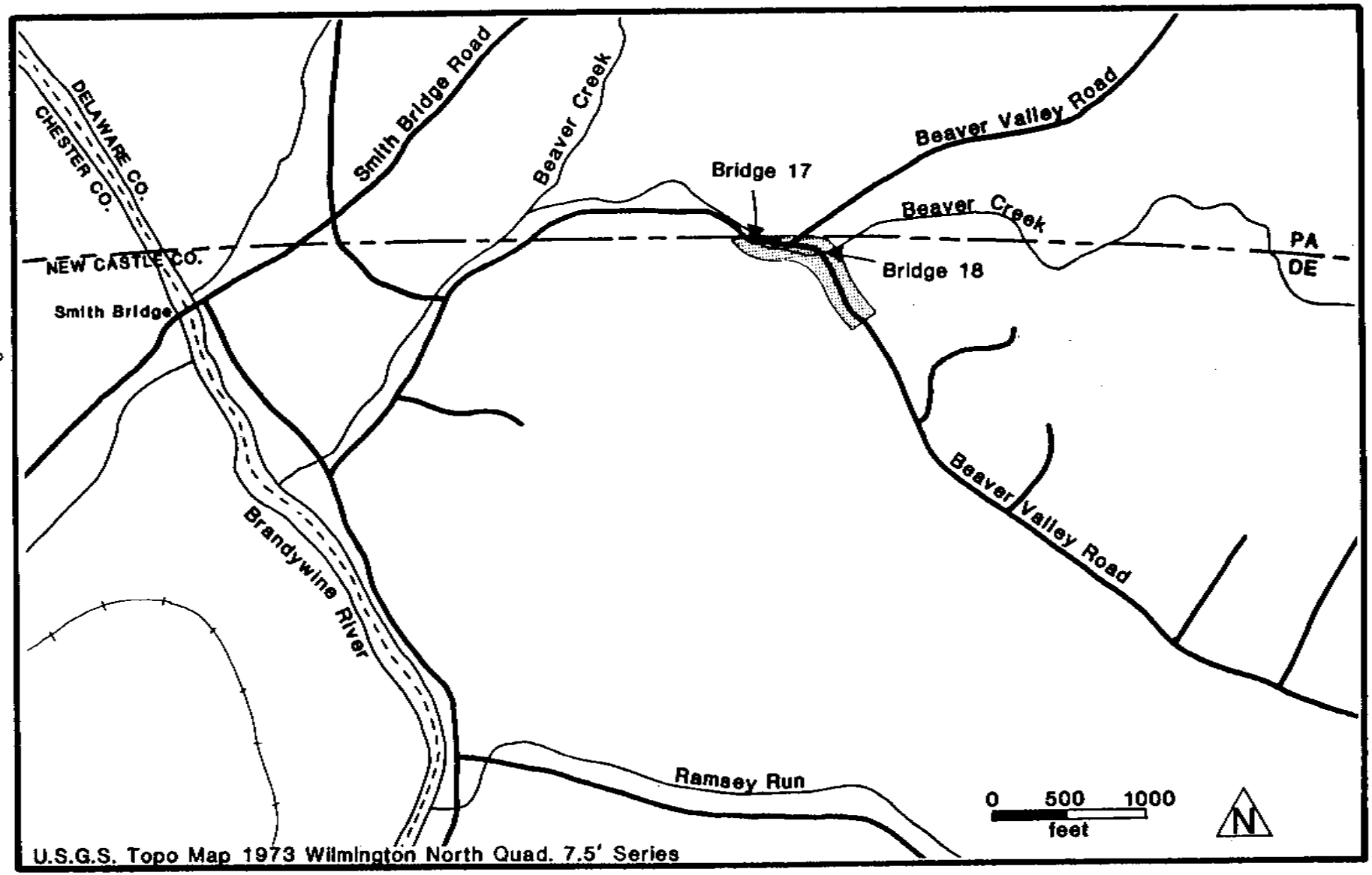


FIGURE 2

Project Area



ENVIRONMENTAL SETTING

The Beaver Valley project area is located in the Piedmont Uplands and the summary of the local environmental setting presented below is abstracted from the work of Custer (1984:23-25) and Custer and DeSantis (1985).

The Piedmont Uplands of Delaware represent the northernmost portion of the Delmarva Peninsula and are characterized by a diversified relief dissected by narrow and deep stream valleys with isolated knolls rising above the general upland level (Spoljaric 1967:3). Thornbury (1965:88) notes that within the Piedmont Uplands there are no large tributaries of the older incised river systems, the Susquehanna and the Delaware. Rather, there are a number of smaller, lower order drainage systems. Some large floodplains can be found along some of the higher order streams such as the White Clay Creek and the Brandywine, Elk, and Northeast Rivers. However, these settings are uncommon. Elevation differences of up to 82 meters (270 feet) can be found between small floodplains of the numerous drainages and the tops of the adjacent knolls, and these elevation differences are sufficient to cause changes in tree community distribution (Braun 1967:192-194). Soils of the Piedmont Uplands can generally be characterized as well-drained with some poorly-drained areas in floodplains and upland flats.

The Beaver Valley project area is approximately 0.2 miles long and extends from the vicinity of the Pennsylvania-Delaware state line south approximately 1000 feet to a point immediately north of Heather Hill Farms (Figure 2). The project area is

centered on two bridges, DelDOT Bridges Nos. 17 and 18 (N-4282) (Plate 1), which are to be replaced by the Department of Transportation. The southern terminus of the project area is approximately 250 feet above sea level. Within the project area, the ground surface descends to an elevation of approximately 210 feet at Beaver Creek near the northern teminus of the project area. Beaver Creek flows swiftly through the project area and is a perennial stream fed by a number of springs. The drop in the gradient of Beaver Creek from the project area to the Brandywine River, which is approximately 0.6 miles to the west, is approximately 20 feet and this gradient and the stream's steady flow have allowed the development of a number of successful mills in the area.

Prominent soil types in the project area are the Glenelg-Chester-Manor and Neshaminy-Aldino-Watchung associations which are medium textured soils formed over micaceous crystalline rocks and dark colored gabbroic rocks (Mathews and Lavoie 1970: 2-3, 7-8). The area is presently well-wooded with numerous small pastures and fallow fields and has has been preserved as a wildlife refuge by Woodlawn Trustees, the present owners of most of the area.

REGIONAL PREHISTORY

The prehistoric archaeological record of northern New Castle County area can be divided into four blocks of time: the Paleo-Indian Period (ca. 12,000 B.C. - 6500 B.C.), the Archaic Period (6500 B.C. - 3000 B.C.), the Woodland I Period (3000 B.C. - A.D. 1000), and the Woodland II Period (A.D. 1000 - A.D. 1650). A

PLATE 1

Beaver Valley Road, Looking North
Towards DelDot Bridge #18

fifth time period, the Contact Period, may also be considered and includes the time period from A.D. 1650 to A.D. 1750, the approximate date of the final Indian habitation of northern Delaware in anything resembling their pre-European Contact form. Each of these periods is described below and the descriptions are summarized from Custer (1984) and Custer and DeSantis (1986).

Paleo-Indian Period (12,000 B.C. - 6500 B.C.) - The Paleo-Indian Period encompasses the time period of the final disappearance of Pleistocene glacial conditions from Eastern North America and the establishment of more modern Holocene environments. The distinctive feature of the Paleo-Indian Period is an adaptation to the cold, and alternately wet and dry, conditions at the end of the Pleistocene and the beginning of the Holocene. This adaptation was primarily based on hunting and gathering, with hunting providing a large portion of the diet. Hunted animals may have included now extinct megafauna and moose. A mosaic of deciduous, boreal, and grassland environments would have provided a large number of productive habitats for these game animals throughout northern Delaware, and watering areas, such as the Mill Creek floodplain and the Hockessin Valley swamps in the study area, would have been particularly good hunting settings.

Tool kits of Paleo-Indian groups were oriented toward the procurement and processing of hunted animal resources. A preference for high quality lithic materials has been noted and careful resharpening and maintenance of tools was common. A lifestyle of movement among the game attractive environments has been hypothesized with the social organizations being based upon single and multiple family bands. Throughout the 5500 year time

span of the period, the basic settlement structure remained relatively constant with some modifications being seen as Holocene environments appeared at the end of the Paleo-Indian Period.

Numerous Paleo-Indian sites are noted for northern Delaware including hunting and processing sites adjacent to the study area near Hockessin (Custer and DeSantis 1985) and adjacent to the Wilmington Medical Center (Custer, Catts and Bachman 1982), possible quarry sites near Iron Hill, and isolated point finds.

Archaic Period (6500 B.C. - 3000 B.C.) - The Archaic Period is characterized by a series of adaptations to the newly emerged full Holocene environments. These environments differed from earlier ones and were dominated by mesic forests of oak and hemlock. A reduction in open grasslands in the face of warm and wet conditions caused the extinction of many of the grazing animals hunted during Paleo-Indian times; however, browsing species such as deer flourished. Sea level rise was also associated with the beginning of the Holocene Period in northern Delaware. The major effect of the sea level rise was to raise the local water table, which helped to create a number of large swamps, such as Churchmans Marsh, which is located approximately 5km south of the study area. Adaptations changed from the hunting focus of the Paleo-Indians to a more generalized foraging pattern in which plant food resources would have played a more important role. Large swamp settings such as Churchmans Marsh supported large base camps as indicated by the remains at the Clyde Farm site. A number of small procurement sites at

favorable hunting and gathering locales are also known in northern Delaware.

Tool kits were more generalized than earlier Paleo-Indian tool kits and showed a wider array of plant processing tools such as grinding stones, mortars, and pestles. A mobile lifestyle was probably common with a wide range of resources and settings utilized on a seasonal basis. A shifting band-level organization which saw the waxing and waning of group size in relation to resource availability is evident.

Woodland I Period (3000 B.C. - A.D. 1000) - The Woodland I Period can be correlated with a dramatic change in local climates and environments that seems to have been a part of events occurring throughout the Middle Atlantic region. A pronounced warm and dry period set in and lasted from ca. 3000 B.C. to 1000 B.C. Mesic forests were replaced by xeric forests of oak and hickory, and grasslands again became common. Some interior streams dried up, but the overall effect of the environmental changes was an alteration of the environment, not a degradation. Continued sea level rise also made many areas of the Delaware River and Bay shore the sites of large brackish water marshes which were especially high in productivity. The major changes in environment and resource distributions caused a radical shift in adaptations for prehistoric groups. Important areas for settlements included the major river floodplains and estuarine swamp/marsh areas. Large base camps with fairly large numbers of people are evident in many areas of northern New Castle County such as the Delaware Park site, the Clyde Farm site, the Crane

Hook site, and the Naamans Creek site. These sites supported many more people than previous base camp sites and may have been occupied on nearly a year-round basis. The overall tendency was toward a more sedentary lifestyle.

Woodland I tool kits show some minor variations as well as some major additions from previous Archaic tool kits. Plant processing tools became increasingly common and seem to indicate an intensive harvesting of wild plant foods that may have approached the efficiency of horticulture by the end of the Woodland I Period. Chipped stone tools changed little from the preceding Archaic Period; however, more broad-bladed knife-like processing tools became prevalent. Also, the presence of a number of non-local lithic raw materials indicates that trade and exchange systems with other groups were beginning to develop. The addition of stone, and then ceramic, containers is also seen. These items allowed more efficient cooking of certain types of food and may also have functioned as storage for surplus food resources. Storage pits and house features during this period are also known from the Delaware Park site and the Clyde Farm site. Social organizations also seem to have undergone radical changes during this period. With the onset of relatively sedentary lifestyles and intensified food production, which might have produced occasional surpluses, incipient ranked societies may have begun to develop, as indicated by the presence of extensive trade and exchange and some caching of special artifact forms. By the end of the Woodland I Period a relatively sedentary lifestyle existed in northern Delaware.

Woodland II Period (A.D. 1000 - A.D. 1650) - In many areas of the Middle Atlantic, the Woodland II Period is marked by the appearance of agricultural food production systems; however, settlements of the Woodland I Period, especially the large base camps, were also occupied during the Woodland II Period and very few changes in basic lifestyles and artifact assemblages are evident (Stewart, Hummer, and Custer 1986). Intensive plant utilization and hunting remained the major subsistence activities up to European Contact. Similarly, no major changes are seen in social organization for the Woodland II Period of northern Delaware.

Contact Period (A.D. 1650 - A.D. 1750) - The Contact Period is an enigmatic period of the archaeological record of northern Delaware which began with the arrival of the first substantial numbers of Europeans in Delaware. The time period is enigmatic because few Native American archaeological sites that clearly date to this period have yet been discovered in Delaware, although numerous Contact Period sites are evident in southeastern Pennsylvania. It seems clear that Native American groups of Delaware did not participate in much interaction with Europeans and were under the virtual domination of the Susquehannock Indians of southern Lancaster County, Pennsylvania. The Contact Period ended with the virtual extinction of Native American lifeways in the Middle Atlantic area except for a few remnant groups.

REGIONAL HISTORY

It is important to consider the historic sites and

archaeological remains of Beaver Valley from a regional context in order to assess their significance. A discussion of the regional history, provided below, includes a summary of the chronological development of the Beaver Valley area. More detailed histories of specific sites will be included in the Phase I and II Survey Results section. Sources for this regional history include previous DelDOT reports (Coleman et al. 1983, 1984, 1985, Catts et al. 1986, Beidleman et al. 1986), New Castle County Deeds (hereafter cited NCD), Orphans Court and Probate records, Brandywine Hundred Tax Assessments (1738-1901), Road Petitions, oral interviews, contemporary newspapers and county histories (Scharf 1888, Ashmead 1884, Wiley 1894, Conrad 1908), historic maps, and secondary works on the history of Delaware and the Middle Atlantic region, Hoffecker (1973, 1977), Weslager (1961, 1967, personal communication 1987), Lemon (1972), Reed (1947), Bausman (1941) and Munroe (1954, 1978, 1984).

The earliest historic settlement in what is now Delaware was a whaling station and agricultural community established by the Dutch West India Company in 1630 near the present town of Lewes. However, this post was destroyed by the Indians in 1631 and no settlement in that area was attempted again until 1659. A Swedish colony was established in 1638 at Fort Christina, near the present site of Wilmington, by the New Sweden Company and this venture was financed by the Swedish government. Although the land was claimed by the Dutch, it was little used and was unsettled when the Swedes arrived. By 1654 a small village, Christianaham, existed behind the fort, and approximately 400 Swedish, Finnish, and Dutch settlers resided in the area.

In the mid-1650s the uneasy coexistence between the Swedes and the Dutch ended when the Dutch seized control of New Sweden. Dutch Fort Casimir, established in 1651, and the town of New Amstel (modern New Castle) became the economic and commercial center for the lower Delaware Valley. The Swedes captured the fort in 1654 and renamed it Fort Trinity. In 1655 the Dutch recaptured the fort. Ownership of the Delaware region changed hands again in 1664 when the English took control of all Dutch possessions in the New World. In 1682 the granting of proprietary rights to William Penn and his representatives by the Duke of York essentially gave economic and political control of the Delaware region to Philadelphia, the new seat of government.

By 1683 the cultivated areas of the region consisted of the three Lower Counties -- New Castle, Kent, and Sussex, in addition to three Pennsylvania counties -- Philadelphia, Buckingham (Bucks), and Chester. The total population of all six counties in 1683 has been estimated to have been about four thousand people (Myers 1912:239). In New Castle County, five tax districts, called Hundreds, had already been established by 1687. Brandywine Hundred, in which Beaver Valley is located, was one of these first five. The settlement pattern for this early period was one of dispersed farmsteads located along the Delaware and its tributaries, where good agricultural land and easy access to water tansportation could be found. These larger tributaries included the Christiana, Brandywine, and Naamans Creek.

William Penn was formally granted possession of Pennsylvania by Charles II in 1681. In October 1682, after arriving in

America, Penn took possession of New Castle and the Three Lower Counties, including all of modern Delaware. Penn settled his possessions by granting tracts and parcels of land directly to settlers. He usually granted to families, with the average size tract being about 500 acres (Myers 1912:53). Larger tracts, however, were not unknown. The lands around Beaver Valley, including all of Brandywine Hundred and parts of Delaware County, were included in one such large tract, Rockland Manor, which was created by Penn in 1682. In 1699, two thousand acres of this tract, including all of Beaver Valley, were sold to the Pennsylvania Land Company, a London-based land speculation company. A resurvey of Rockland Manor in 1712 found that the entire tract contained approximately 60,000 acres, of which approximately 4,120 acres were in Delaware (NCD T-1-216). In 1722 William Hicklen purchased 180 acres of Rockland Manor from Tobias Collete, Daniel Quare, Henry Gouldy, survivors of the original members of the Pennsylvania Land Company (NCD G-1-387, 388). Hicklen's parcel included most of Beaver Valley and all of the study area.

Brandywine Hundred and New Castle County were part of a broader regional economy that was centered in Philadelphia. By the last quarter of the seventeenth century, Philadelphia was the dominant figure in the economy of the lower Delaware Valley and New Castle County was part of Philadelphia's agricultural and commercial hinterland. Farmers in this region sent their grains to local milling centers and from there, flour and bread were shipped to Philadelphia for export to the West Indies, other American colonies, and Europe. The farmers of New Castle County

quickly adapted to this market system of agriculture and it is estimated that over one-half of the farmers in New Castle County were situated within eight miles, or approximately a half-day's journey, of a mill or shipping wharf.

Swedish settlers to the region grew rye and barley on their farms, but these grains were quickly replaced by wheat when it was found that wheat could be more easily grown and had ready markets. Once farmers realized that wheat was a profitable commodity, they began to shift from a subsistence to a market oriented agriculture. Corn was also grown, but in general was not as popular as wheat in this early period. The transportation of grains to milling sites supported an extensive coastal trade employing shallops and other small, shallow draft boats. These milling sites were among the earliest manufacturing complexes in the region. One such early milling and transshipment center was Naaman's Creek Landing along the upper reaches of the western most branch of Naaman's Creek. According to the earliest road petitions for Beaver Valley Road, this site was used by a number of farmers in northern Brandywine and the Beaver Valley area during the eighteenth century.

Settlement in northern New Castle County during the eighteenth century continued much as it had in the previous century. As the transportation network improved, colonists began to move farther inland away from the navigable rivers and streams. Agriculturally productive areas were settled first, but as the population began to grow, more marginal areas were also occupied.

The median size of land warrants granted in 1735 in New Castle and Kent counties was between 200 and 300 acres, with the typical grant close to 200 acres (Penna. Archives 1891:193-202). This trend towards smaller average holdings as compared to seventeenth century grants was due to a tendency for the large tracts to be divided and subdivided by sale and inheritance. Lemon (1972) substantiates this trend in noting that by 1750 it appears that the density of rural settlement in southeastern Pennsylvania and northern New Castle County was approximately five households per square mile.

Farming in the eighteenth century in New Castle County continued to be a system of mixed husbandry, combining the cultivation of grains with the raising of livestock. A four field system of crop rotation was also commonly used. Farming was the most important occupation for the vast majority of the area's population. Wheat remained the primary crop, followed by corn, barley, oats, and garden vegetables. In many areas, generations of repeated tillage had begun to exhaust the soil. Thus, agricultural practices in New Castle County followed an extensive, rather than an intensive, use of the land (Lemon 1972:179).

The importance of the land and animals to the settlers in the area, even in the first half of the eighteenth century, is revealed by the hiring of a ranger for Rockland Manor. Richard Sanderson, the "Ranger of Rockland Manor," was given "full authority and power to range, oversee, and take care of all timber, trees and woods" by the proprietors, John, Thomas, and Richard Penn. Sanderson was also to retrieve all horses, cattle,

and stray animals. His payment for successful cases was one-third of any lumber, horses, or strays recovered, with the exception of cattle (NCD K-1-287).

The road network in north-central New Castle County improved considerably over the course of the eighteenth century due both to population growth and prospering interregional trade. By 1750, the roadbeds of many of the area's present-day state roads (Routes 4, 7,and 273; portions of Pennsylvania's Route 896) were already established. Prior to the Revolutionary War, there were probably four main thoroughfares in the study area: The Old Wilmington Road, the road from Ockesson Meeting House to Cuckoldstown (established in the 1730's), the Kemblesville Road, running from Chester County to Corner Ketch, and the Limestone Road (present day Route 7).

Both the methods and routes of transportation underwent substantial changes in New Castle County as first turnpikes, then canals, and finally railroads were introduced. The most significant canal built on Delaware was the Chesapeake and Delaware Canal, completed in 1829. Throughout the nineteenth century, improved transportation was the key to urban, agricultural, and industrial development. The first successful turnpike in Delaware, and the one that is most important to the history and development of the study area, was the Newport and Gap Turnpike, begun in 1808.

The first documented reference to Beaver Valley Road is a 1751 road petition. The petitioners wanted access to the Concord Pike, and ultimately, to the milling and shipping facilities at Naaman's Creek. This petition asks that the road, called

Naaman's Creek Road, be laid out "as Near the first Laying out as Possible" supporting Scharf's (1888:904) claim that Beaver Valley/Naaman's Creek Road existed before 1751 and possibly in the seventeenth century. Evidently the road was constructed, at least in part, after the 1751 alignment for a number of later petitions from 1796-1798 ask the General Court to change the course of the road and adjust damage costs.

Between 1796 and 1799, Beaver Valley/Naaman's Creek Road was reviewed and resurveyed three times (New Castle County Road Petitions). The 1751 alignment through the study area (William Hicklen's property, Figure 3), however, remained undisputed and unchanged. The last petition presented to the Court of General Sessions in May 1799, called somewhat testily the "Re-Re-Review" by the judges, includes the signatures of 70 inhabitants of Brandywine Hundred who would benefit from the road. William Hicklen's son William and grandson Joshua were among the petitioners. The importance of Philadelphia in the area's economy can be seen in the petitioner's description of the needed Naaman's Creek Road as "the road extending from Chandler's Run (Beaver Creek) to the Philadelphia Road (Concord Pike) to Naaman's Creek Landing" (New Castle County Levy Court, Miscellaneous Road Papers). Thus, by 1751, and certainly by 1799, Beaver Valley Road/Naaman's Creek Road was complete from Beaver Creek (Chandler's Run) at the state line to the Concord Pike and from there to Naaman's Creek Landing (Figure 4). The relationship of Beaver Valley/Naaman's Creek Road to other roads in the area can be seen in Heald's 1820 map of the roads of New Castle County (Figure 5).

FIGURE 3

1751 Alignment of Beaver Valley/Naaman's Creek Road

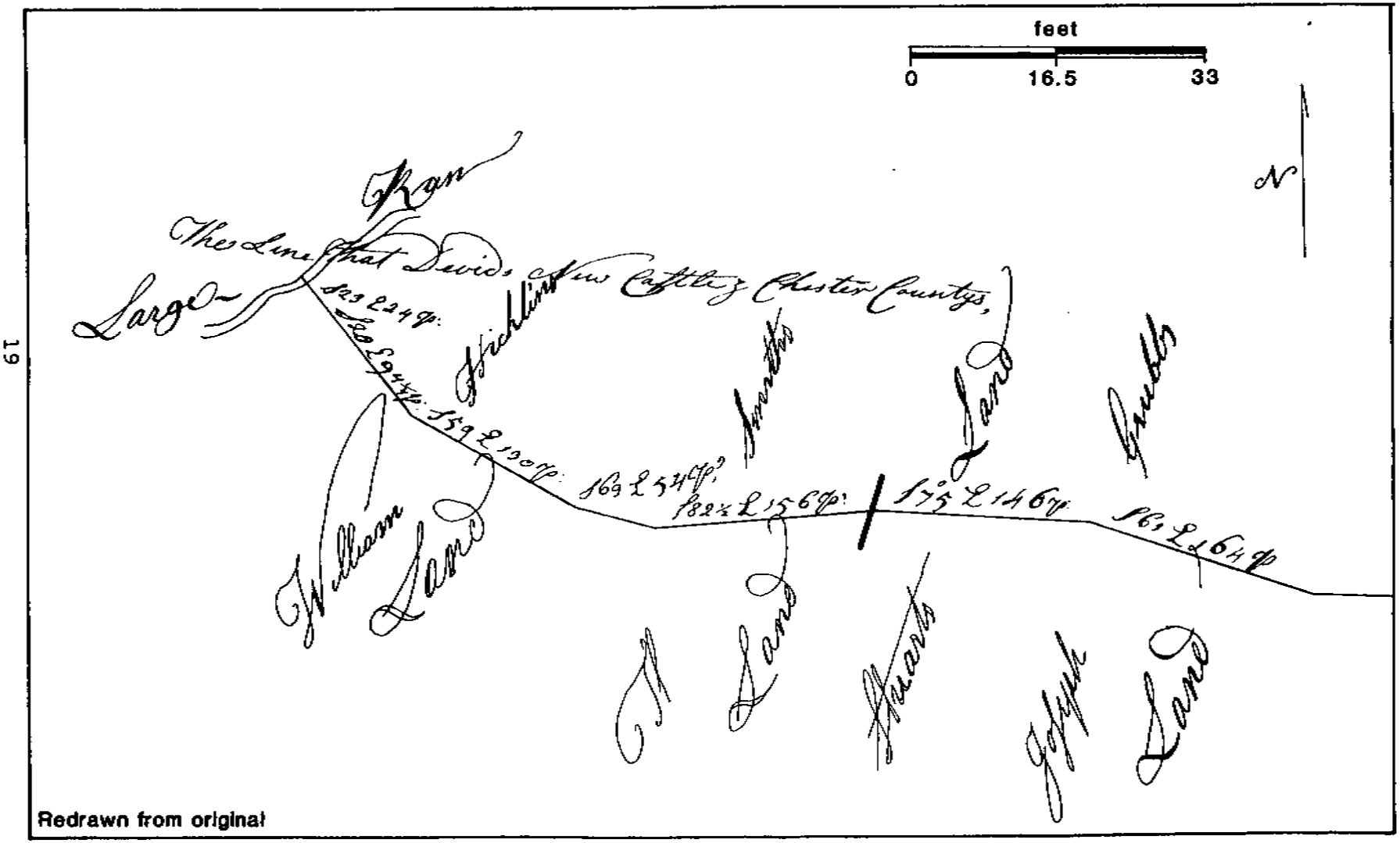
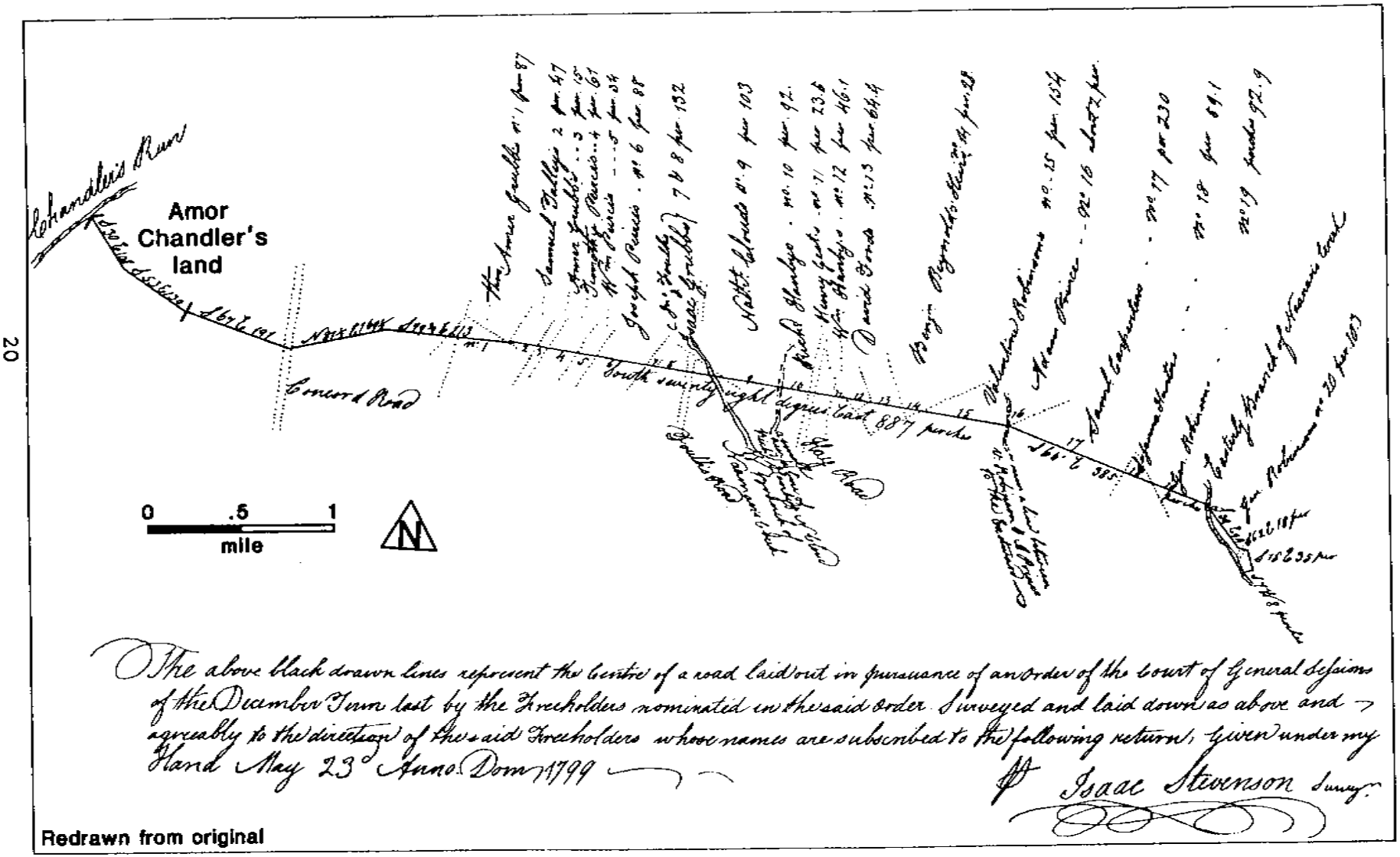


FIGURE 4

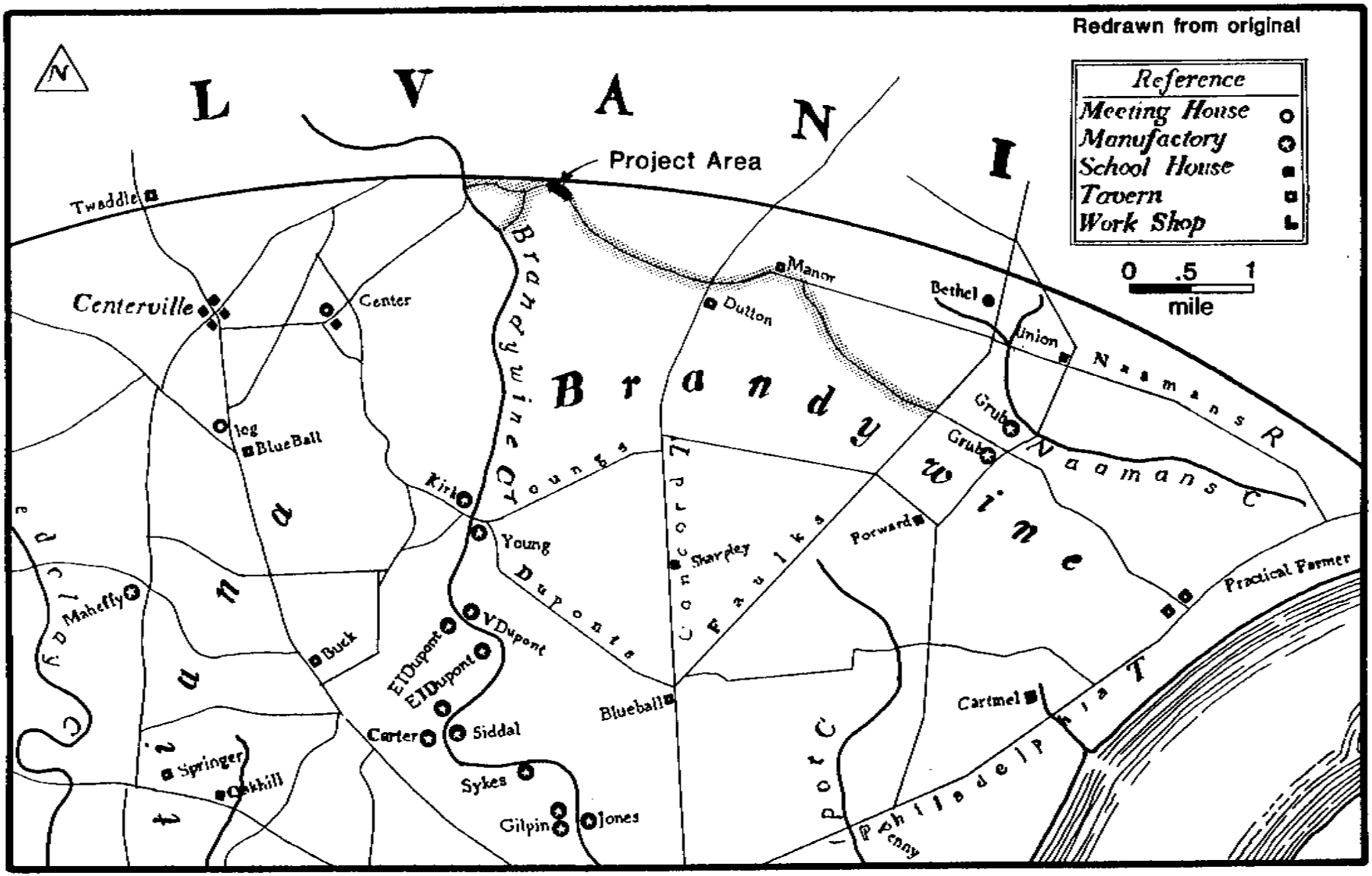
1799 Alignment of Beaver Valley/Naaman's Creek Road



Redrawn from original

FIGURE 5

Detail of Henry Heald's 1820 Roads of New Castle County, Showing BV/NC Road



In northern Delaware the nineteenth century was marked by rapid industrial and urban growth, population expansion, and was accompanied by a noticeable decline in the number of farmers. The rapid growth of the population during the early decades of the century forced many new farmers in the Middle Atlantic region to clear land of poor or marginal quality. Poor farming practices, continued largely unchanged from the previous century, also contributed to the decline in agricultural production. Another significant factor in the first decades of the century was the collapse of inflated wheat prices after the end of the Napoleonic Wars. Because of these factors, many farmers in Delaware at this time were hard pressed to turn a profit from their farmsteads. The result was an outmigration of a large portion of the population during the 1810s-1830s to better lands to the west, particularly in the Ohio River Valley. Tax Assessment records for Brandywine Hundred show a number of people, particularly young men, leaving the area at this time. Hancock (1947:374) notes that between 1810 and 1840 the population of Delaware remained stationary, despite a favorable birthrate and only increased after 1840.

The loss of jobs related to agriculture in the first decades of the nineteenth century was partly offset by the development of new sources of income and employment, particularly in urban and industrial contexts. Thus, much of the surplus population that had in previous centuries been farm laborers, tenants, or unemployed, moved into urban and industrial centers where jobs were more plentiful. These trends occured over the first half of

the nineteenth century and by 1869 were well established.

The Beaver Valley area, however seems to have fared much better than other areas of Delaware during the early nineteenth century. In 1735 William Hicklen and his wife Dinah sold the 180 acre parcel they had purchased from the Pennsylvania Land Company to their son William (NCD X-1-210). William, the father, died in 1772. Evidently William, the son, received a substantial and prosperous farm from his father. In 1781 William Hicklen of Brandywine Hundred was assessed 26 pounds in taxes. By way of comparison, two other farmers in the area, Francis and Joseph Day, were assessed 5 and 12 pounds respectively. By the turn of the century, William Hicklen (Jr.) had amassed a substantial estate. In a will dated 25 August 1801, William Hicklen gave to his wife Susanna a substantial amount of furniture and, until she remarried, a "good hackney," a cow, and a yearly allowance of 100 lbs. of "good pork and as much beef," 8 bu. each of wheat and corn, 5 lbs. of wool, and 12 lbs. of flax. To his eldest son, John, Hicklen gave the largest part of his plantation and part use of the cellar, smoke house, oven, apple kiln, draw-well, and clothes-press.

William Hicklen (junior) died shortly after his will was made in 1801. An inventory of his estate in November 1801 valued his personal possessions at nearly 850 pounds sterling. In 1812 John Hicklen sold 90 acres of property to Amor Chandler, a farmer (NCD Q-8-40). In 1813 Hicklen sold an additional 26 acres to Amor Chandler (NCD Q-8-40). These two parcels included all of the study area and marked the beginning of the Chandler family in Beaver Valley. Amor Chandler and his descendants, most notably

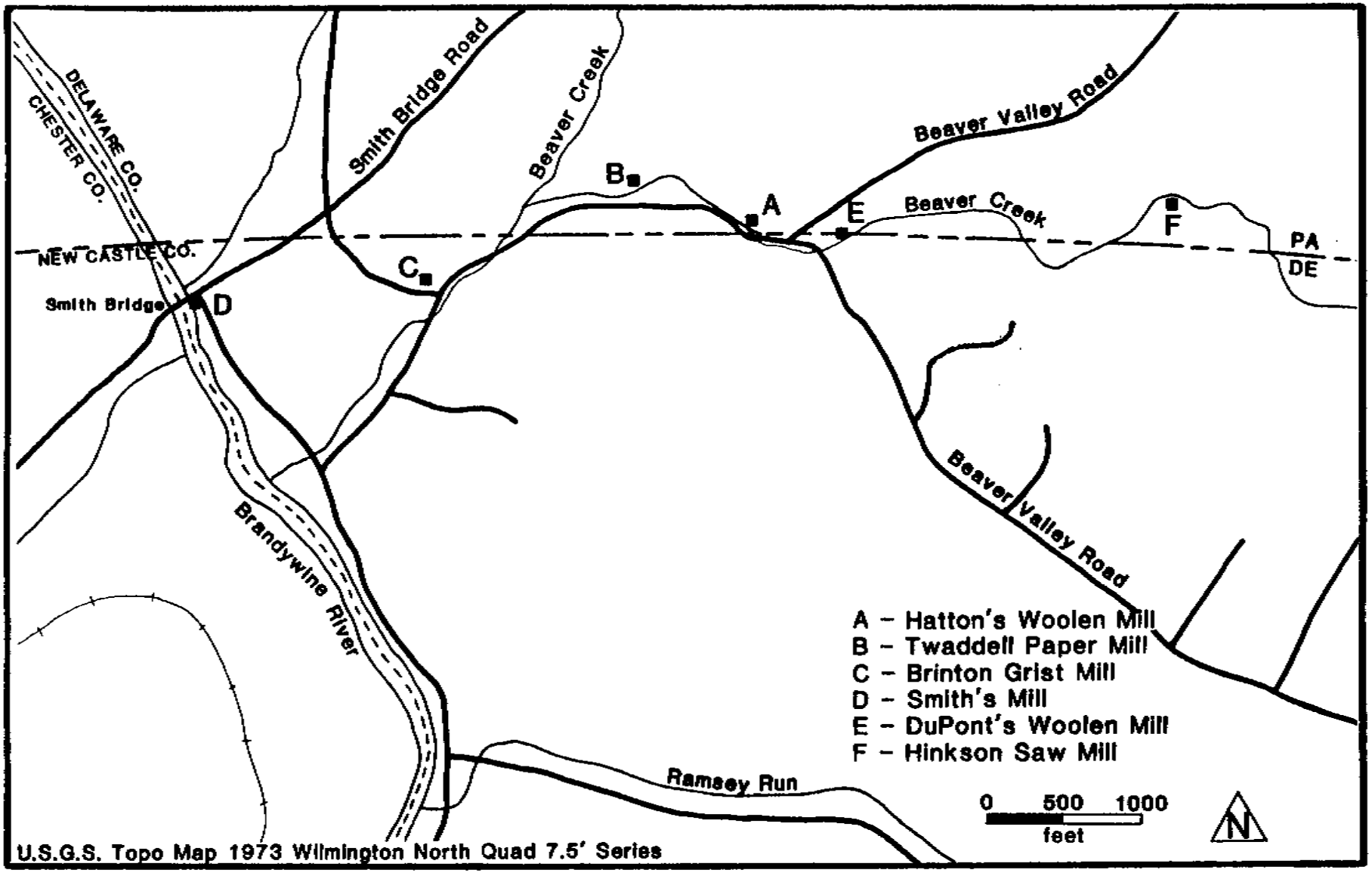
his sons Jehu and Amor H., settled in Beaver Valley, which became known locally as Chandler's Hollow. Beaver Valley, or Chandler's Hollow, was the center of a small, but relatively prosperous milling and farming community during most of the nineteenth century. According to an 1826 report of the Delaware Commission on Manufactures, Beaver Creek was well suited for milling with a fall of approximately 8-9 foot drop available over its course to the Brandywine.

During the nineteenth century at least 6 different mill sites were occupied along Beaver Creek (Figure 6, Mill Sites A-F). Conrad (1908:456) notes that although the water power furnished by Beaver Creek gave the locality a great importance in the first half of the nineteenth century, the "furious freshets to which this precipitous little stream is subject" repeatedly caused much damage and signalled the inconsistency of flow that was to help close most of the mills by the last quarter of the century.

Although most of the mills along Beaver Creek were located closer to the Brandywine, two mill sites were located near the project area and were important to the history of the area. The first of these two mill sites was that of Sunnydale Paper Mill (Figure 6; Mill Site B). Sunnydale was built in 1811 by John Farra as a woolen mill. Farra then leased the mill to the La Forrest brothers who operated it until it was destroyed by fire in 1824. The mill remained in ruins until 1830 when it was rebuilt as a paper mill. The mill was then occupied by William and John Gilmore for a year when Farra took possession of it and

FIGURE 6

Mill Sites along Beaver Creek



operated it until his death in 1832. Farra's son Daniel took over and operated the paper mill until 1851 when it was again destroyed by fire. Daniel Farra then sold the property to his son-in-law, Francis Tempest, who rebuilt the mill and added steam power. Steam power was important improvement as Beaver Creek did not consistently supply enough water to power the mill (Ashmead 1884:318).

Tempest operated the the mill until 1901 when it was sold to Edwin Garrett. Writing and book papers were made at the mill until sometime around the turn of the century when manila and tissue papers were made. At this time Sunnydale had a 36 inch cylinder continuous length paper machine and two 140 lb. beaters. While Tempest owned and single-handedly operated the mill, production was approximately 1,000 pounds a day (Simmons 1947:494). Garrett enlarged the mill after he acquired it in 1901 and roughly doubled its capacity. Garrett also operated the mill single-handedly until 1922 when he hired L. A. Mayer, a millwright, who ran the mill until it closed in 1930. Sunnydale was dismantled in 1933.

Sunnydale mill received water from two sources: Beaver Creek and from a mill pond on Trout Run further north in Pennsylvania (Figure 6; Mill Site B). That both of these water sources had to be supplemented with steam power points toward one factor in the decline of Beaver Valley as a manufacturing community beginning in the mid-nineteenth century.

Immediately east of Sunnydale mill was the "old Woolen Mill" (Figure 6: Mill Site A). In 1809 Peter Hatton built a fulling mill there and in 1817 he erected a woolen factory and

manufactured flannels, satinets, and other cloth. In 1826 both Hatton's fulling mill and the Sunnydale paper mill were supplied by the same race. In this year, the equipment in Hatton's fulling mill consisted of one pair of stocking and carding machines. In 1843 the Hatton mill was owned by Philip Hizer and was washed away in the same flood as a number of other mills. The property then went to Tempest who used the extra flow to bolster the declining flow from Beaver Creek.

According to Scharf, Hatton's "old woolen mill" was once owned by Stephen Broadbent and used to manufacture Turkish carpets. The building was next occupied by a clover mill and by 1858 was used as a plow factory by William Morrison, Amor Jeffries, and Horace Mousley. The water power was used to operate a trip hammer and the plows were finished at a cooperating factory in Pennsylvania (Scharf 1888:906). By 1875 the building was again a clover mill.

An additional mill site along Beaver Creek in the nineteenth century was another woolen mill located east of Beaver Valley road and south of Beaver Creek (Figure 6; Mill Site E). Charles Dupont built the woolen mill in 1825. Both the mill site east of Tempest's and Dupont's woolen mill received water from Beaver Creek from a common dam east of Dupont's mill. A number of other important mills were located along Beaver Creek in the eighteenth and nineteenth centuries. With the exception of Sunnydale, almost all were defunct by the end of the nineteenth century. Closest to the confluence of Beaver Creek and the Brandywine was Isaac Smith's flour and grist mill (Figure 6; Mill Site D).

Taking all of its power from the Brandywine, Smith's mill was an important milling center beginning in the late eighteenth century. Reflecting this mill's importance, a number of New Castle County road petitions dated betweem 1829 and 1857 ask for better access to the mill from Beaver Valley Road (NCC Road Papers). This mill was purchased by William P. Talley sometime in the nineteenth century and continued to mill flour, although on a much smaller scale, until the last quarter of the nineteenth century (Scharf 1888:907). Another important mill site in Beaver Valley was the grist mill owned by Peter Hatton and later by Joseph Brinton (Figure 6; Mill Site C). Located approximately 1/4 mile west of the project area along Beaver Creek, this grist mill, according to Scharf, was an important "public convenience" in the mid-nineteenth century. All of these mills were defunct and the sites abandoned by the end of the nineteenth century. The Dupont wool mill was destroyed by a flood in 1843 that seriously damaged a number of mills along Beaver Creek, including Hatton's mill.

These mills were an important part of the largely agricultural economy of the Beaver Valley area. In 1879 the population of Beaver Valley, described as a "small post village" in a state directory, was approximately 150 persons. At this time approximately 23 farmers and their families are listed as living in the area. A store and post office and a blacksmith shop along Beaver Valley Road provided goods and services to the mills and the surrounding farming community. In 1879 the store and post office was owned and operated by William E. Butler, who purchased the store from Amor H. Chandler in 1877. Jehu Chandler

owned and operated the blacksmith shop across the road. By 1926 both the store and the blacksmith shop were closed.

The Beaver Valley area has always been predominantly rural in nature, consisting of dispersed homes and shops, agricultural fields or pasturage, and woodlots (Plate 2) and continues to be so today. Most of the area is currently owned by Woodlawn Trustees which has been purchasing large amounts of land in the area since the early twentieth century. All of the late nineteenth century structures have been removed although a number of the earlier stone houses have been restored and are rented by Woodlawn Trustees. The largely wooded areas on both sides of Beaver Creek from Beaver Valley Road west to the Brandywine have been preserved by Woodlawn Trustees as a wildlife refuge.

GENERAL RESEARCH AND FIELD METHODS

Phase I research consisted of two steps: 1) background and archival research, and 2) field reconnaissance. Background and archival research consisted of consultation with the staff of the Delaware Bureau of Archaeology and Historic Preservation (BAHP), review of all inventories of prehistoric and historic cultural resources maintained by the BAHP; review of historic atlases, maps, and secondary works; interviews with local landowners and experts in local history; and review of archival materials such as deeds, tax assessments, probate records, road books and petitions, and other court records. The background research for prehistoric sites included the review of the prehistoric archaeological literature on applicable predictive models (Custer 1983, 1984; Custer and Wallace 1982; Custer and DeSantis 1986;

PLATE 2

Area A Looking North, December 1986

Gardner 1978). All of the cultural resources identified by the BAHP in the Beaver Valley area are shown in Figure 7. The current status of each of these known cultural resources is given in Table 1.

Field reconnaissance for the Phase I Survey consisted of (1) a detailed pedestrian survey of the project area and surrounding area and (2) series of shovel tests along the project ROWs and in portions of the project area judged to have a high potential for prehistoric and/or historic remains. In areas of complex stratigraphic sequences or to further identify historic or prehistoric features penetrated by a shovel test, a small number of 3 X 3 foot test units were excavated as part of the Phase I Survey. All excavated soils were screened through 1/4" mesh, and test units were excavated to a sufficient depth to reach soils too old to contain artifacts.

Shovel tests were employed as the standard Phase I test unit because of their effectiveness in detecting buried cultural materials (McManamon 1981) combined with the low intensity of effort required for their excavation compared with larger, measured test units. For reference purposes, shovel tests were grouped by area and by sequence excavated within that area. Each shovel test received a letter designation identifying the project area and a number designating a transect sequence. Shovel tests within each transect were numbered in ascending order from north to south, and in area B, from east to west. Thus shovel test A-4 was the fourth shovel test excavated in Area A.

All shovel tests were excavated to a depth of at least one and one half foot. All soil was screened through 1/4 inch mesh

FIGURE 7

Cultural Resources Identified by the BAHP in the Beaver Valley Area

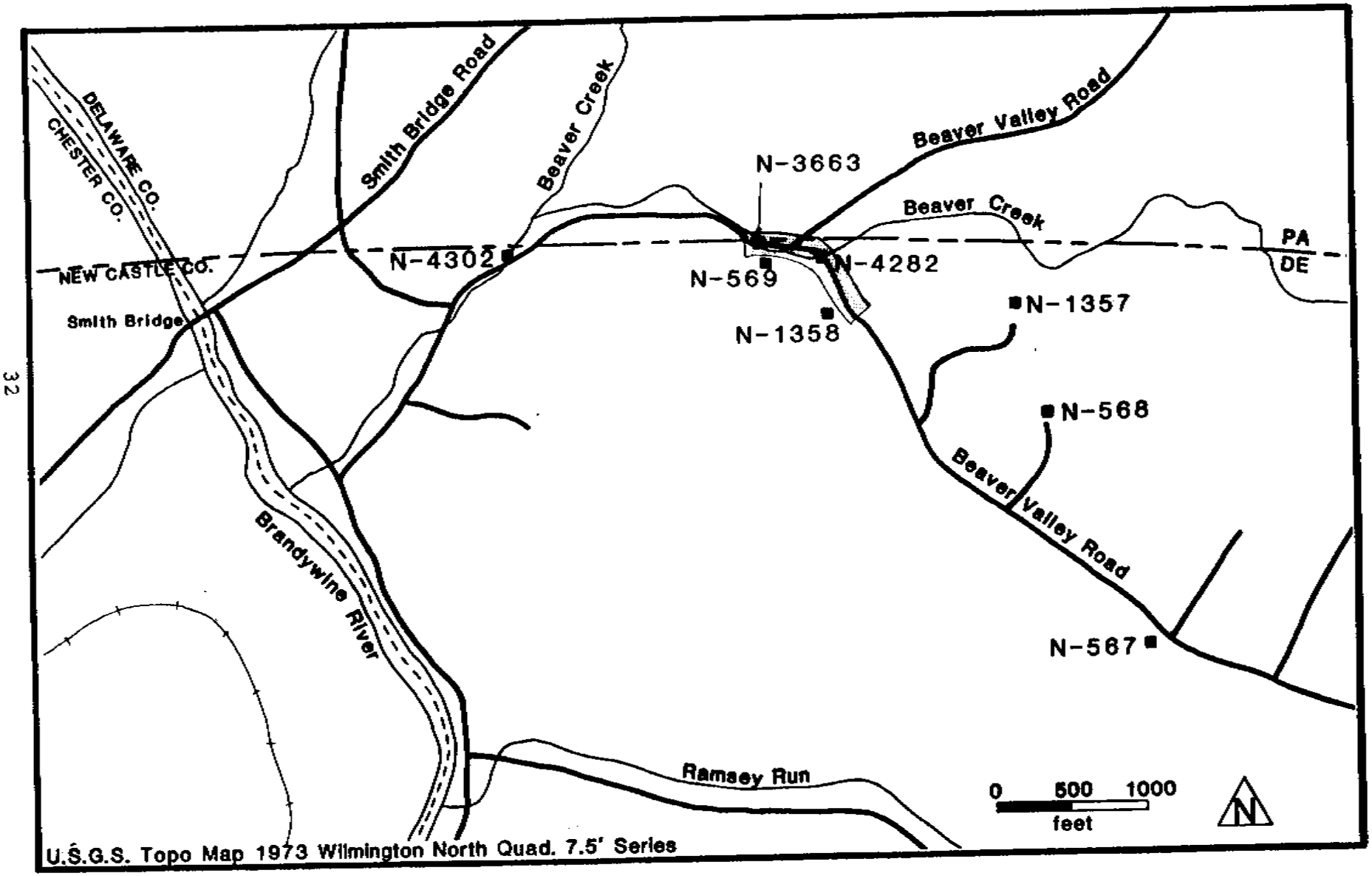


TABLE 1

CURRENT STATUS OF CULTURAL RESOURCES
IDENTIFIED BY THE B.A.H.P. IN THE BEAVER VALLEY AREA

Cultural Resource Name	S/A	A	B	C	D	E	F	G	H	I	J	K
Concrete Bridge Beaver Valley Creek Road N-4302	S										x	x
Beaver Valley Rock-shelter N-3663	A				x				x		x	x
Beaver Valley Farm House N-569	S		x	x			x				x	x
Steel Bridge Beaver Valley Creek Road N-4282	S										x	
House 800 Beaver Valley Road N-1358	S	x	x	x			x				x	x
House 701 Beaver Valley Road N-1357	S		x	x			x			x		x
House 601 Beaver Valley Road N-568	S		x	x			x			x		x

Key:

S/A = Standing structure/Archaeological site only
A = Appears on Rea and Price Atlas (1849)
B = Appears on Beer's Atlas (1868)
C = Appears on Baist's Atlas (1893)
D = National Register
E = National Register eligible
F = Potentially National Register eligible
G = Historic archaeological site
H = Prehistoric archaeological site
I = Not field checked
J = Field checked by survey
K = Out of project R.O.W.

(See Figure 7 for Locations)

and all cultural materials recovered were bagged according to individual tests. Field notes were taken for each test unit and included the thickness and type of soil horizons, color and

textural characteristics of all soils, and cultural materials recovered.

Phase II site investigation testing was carried out to determine the National Register eligibility of any sites discovered during the Phase I survey. Phase II testing consisted of the systematic excavation of 3 X 3 ft test units and measured test trenches to determine the contextual integrity and limits of the sites.

PHASE I SURVEY RESULTS

To facilitate the discussion of the Phase I and II surveys, the Beaver Valley project area was divided into four study areas: 1) Area A, along the east side of Beaver Valley Road south of Beaver Creek; 2) Area B, a strip of floodplain between Beaver Creek to the south and Beaver Valley Road to the north; 3) Area C, along the west side of Beaver Valley Road north of Heather Hill Farms (N-1358) and south of Beaver Creek; and 4) Area D, south of Beaver Valley Road near the Delaware-Pennsylvania state line. These four study areas are shown in Figure 8.

A summary of the background research and field reconnaissance conducted during the Phase I survey is presented below. The goal of the Phase I survey was to locate and identify all cultural resources within the ROW and to identify areas of disturbed soil or with a potential for intact subsurface landscapes. The location of all potential cultural resources noted on historic maps within the project area is shown in Figures 9 and 10 and are summarized in Table 2. Artifact inventories from Phase I and II testing are shown in Appendix I.

FIGURE 8

Study Areas A through D

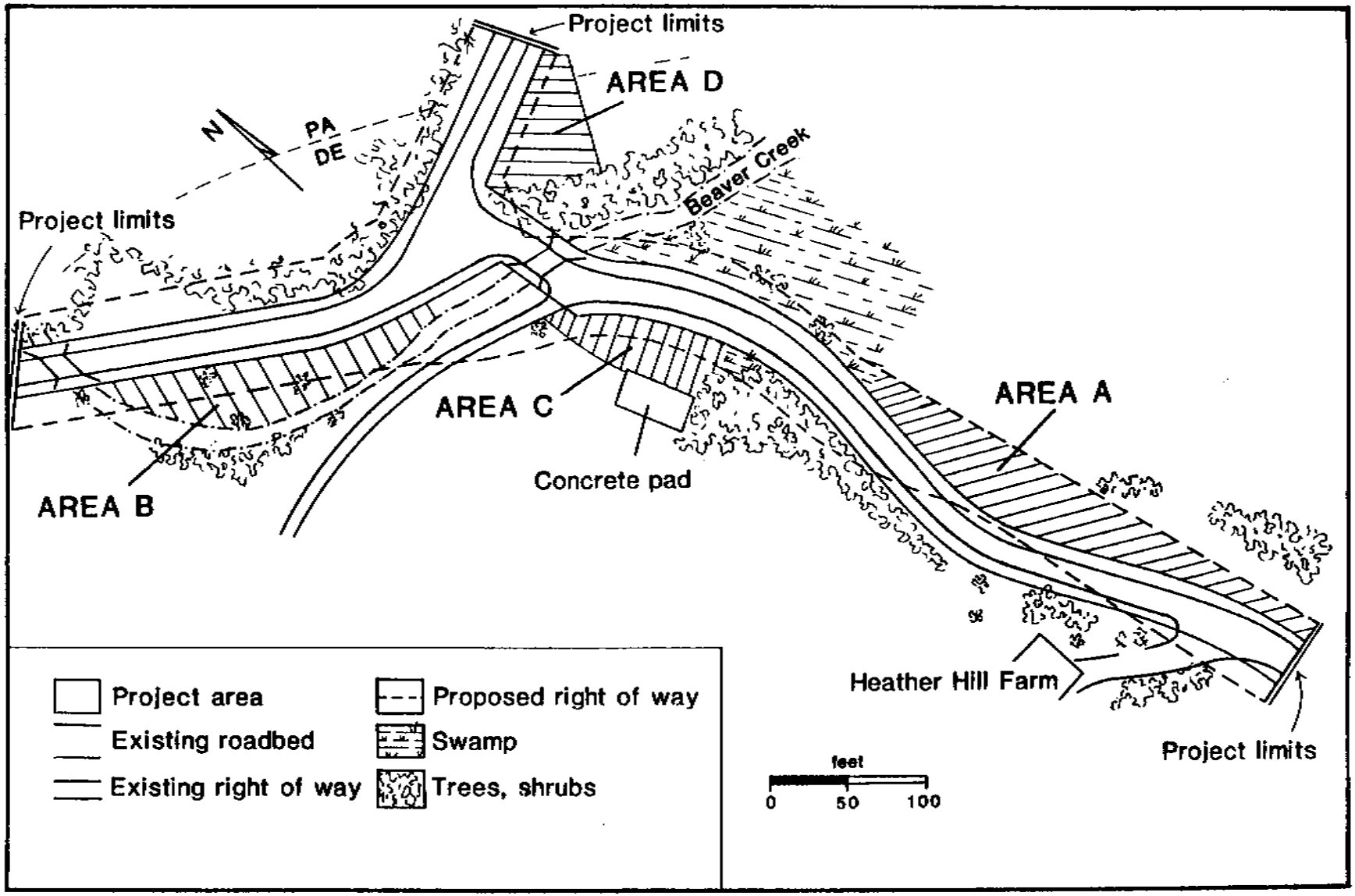


FIGURE 9

Potential Resources Identified by Background Research in Area A

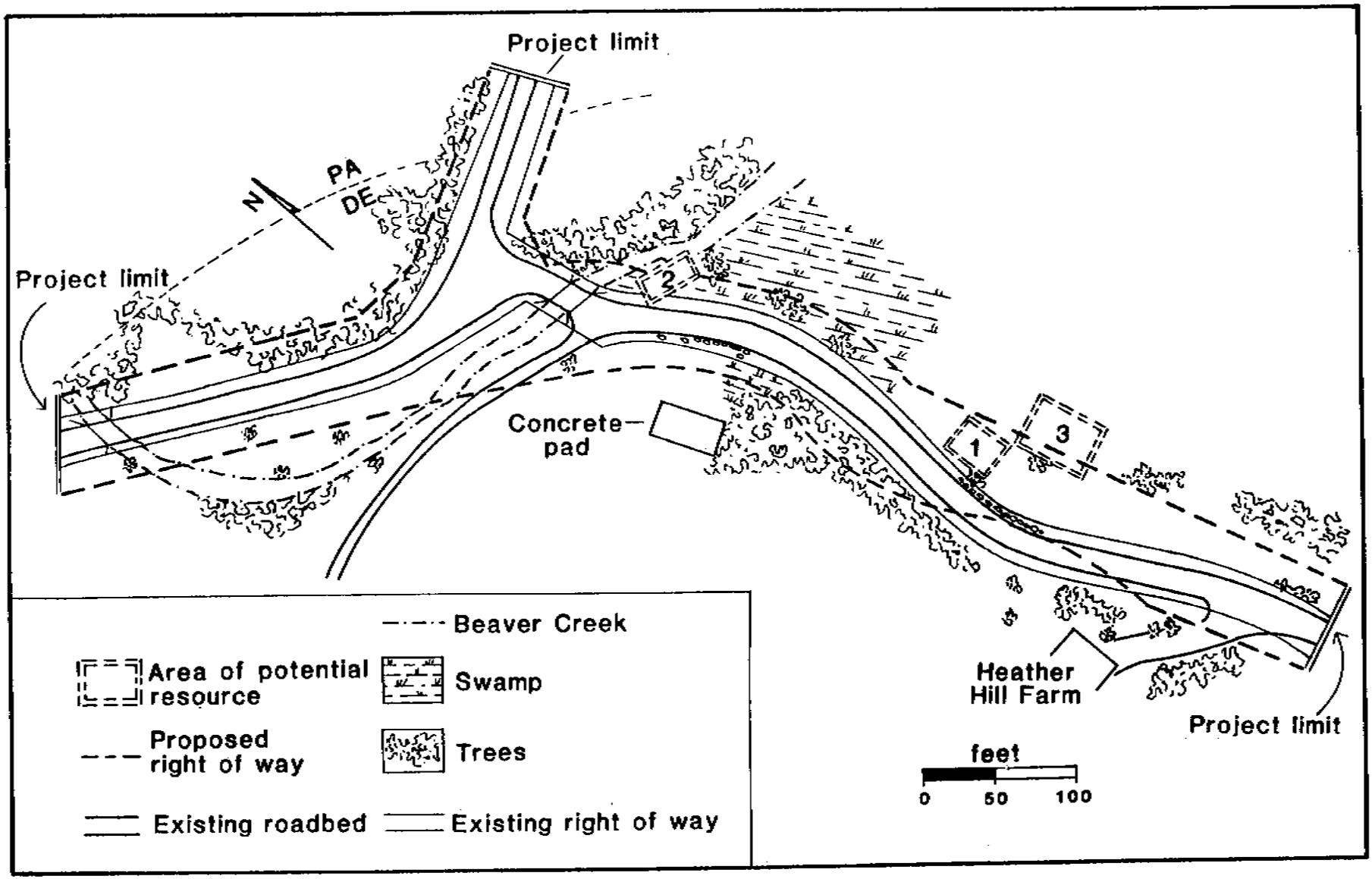


FIGURE 10

Detail of 1914 Topographic Map Showing Beaver Valley Road

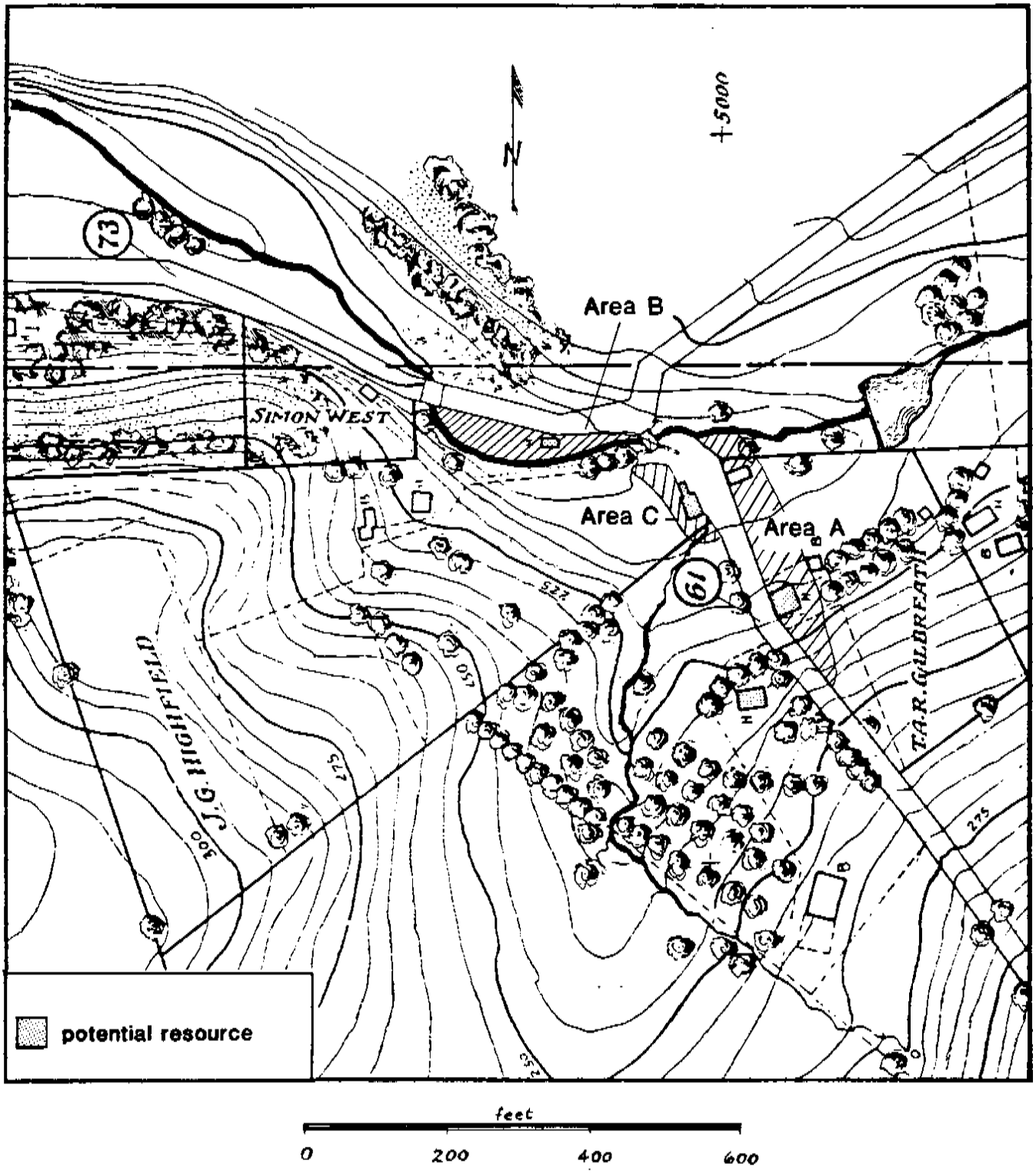


TABLE 2

HISTORIC MAPS LOCATING POTENTIAL RESOURCES 1-3 IN AREA A

	P.R. 1	P.R. 2	P.R.3
Rea and Price 1849	Yes "Talley & Clouds' Store"	No	No
Beers 1868	Yes "Store & P.O."	Yes "Shoe Sh[op]"	No
Lee 1875	Yes	Yes	No
Hopkins 1881	Yes "A. Chandler Store & P.O."	Yes	No
Baist 1893	Yes "Store & P.O."	Yes "Geo. Goodley [House]"	No
Woodlawn 1911	Yes	Yes	No
Woodlawn 1914	Yes "House & Barn"	Yes	No
Woodlawn 1916	Yes "House & Barn"	Yes	No

BACKGROUND RESEARCH PREHISTORIC SITES

Sites from all time periods are expected to occur within the Beaver Valley study area. The Beaver Creek floodplain is a possible location for microband base camps of all time periods. However, earlier research (Custer 1980) has shown that some Piedmont floodplains are heavily scoured by natural erosion and such erosion may have destroyed any sites in the Beaver Creek floodplain. Procurement sites from all time periods are expected on all upland slopes and knolls within the project area.

Although the study area is located in a section of Delaware with a high to medium potential for significant prehistoric archaeological sites (Custer 1983:Figure 41), not all of the sites expected to be found in the study area are likely to be significant enough to warrant listing in the National Register of Historic Places. Procurement sites located on upland slopes would be significant only if they are unplowed, even though the study area is subjected to a high degree of development pressure (Custer and DeSantis 1985:Figures 26 and 27). Any buried or intact sites found in the Beaver Creek floodplain may be significant because such sites are rare in the Piedmont Uplands (Custer and Wallace 1982; Custer and DeSantis 1985:Figures 24 and 25).

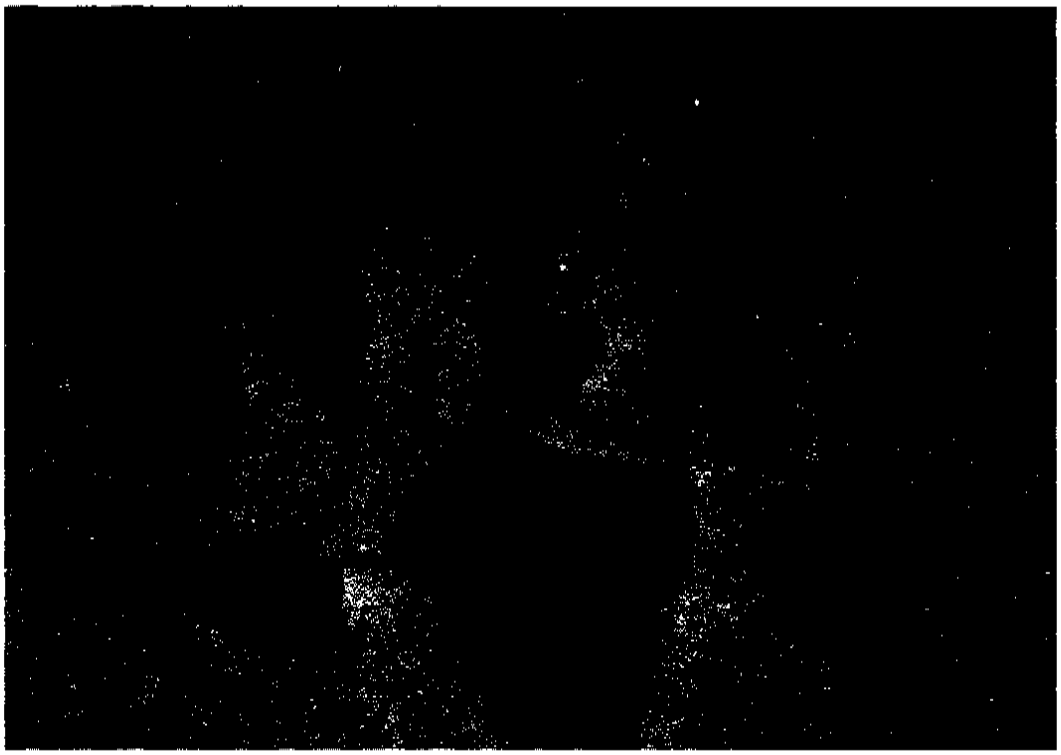
The Beaver Valley Rockshelter (N-3663, 7NC-B-2) is located near the project area, and was partially excavated by the Archaeological Society of Delaware in 1948. The site is listed on the National Register of Historic Places and artifacts recovered from these excavations included an argillite stemmed point, broadspears, other stemmed points and various unidentified quartz-tempered ceramics (Plate 3; Weslager 1953). These artifacts indicate a Woodland I and II occupation. The site will not be affected by the proposed project.

AREA A: EAST OF BEAVER VALLEY ROAD AND SOUTH OF BEAVER CREEK

Area A is a grassy, gradually sloping area east of Beaver Valley Road and extends from the south bank of Beaver Creek south to the southern project boundary (Figure 8 and Plate 2). Area A consists of three terraces and two intervening gradual slopes

PLATE 3

Artifacts from Rockshelter

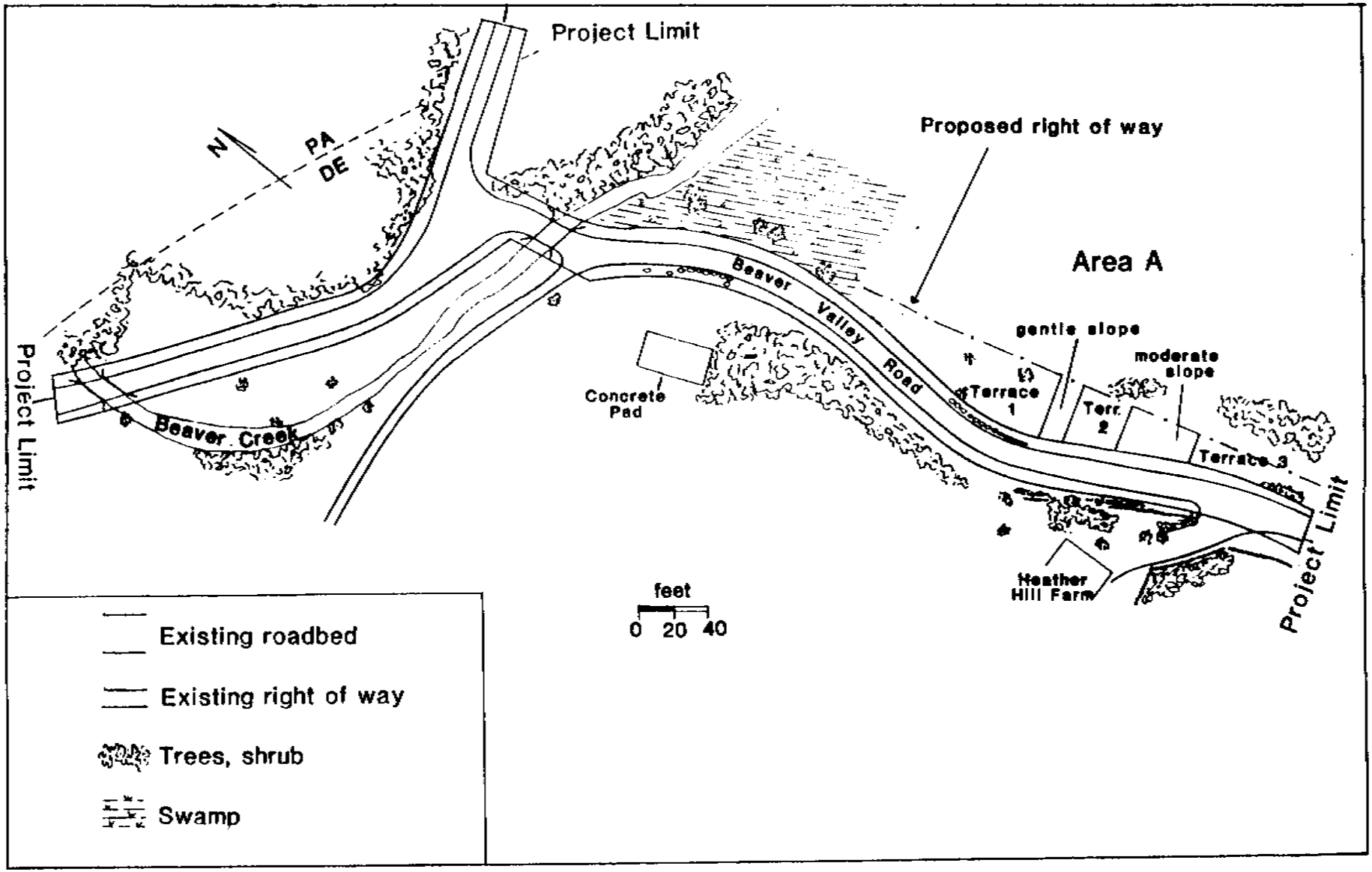


(Figure 11). Terrace 1 is immediately south of Beaver Creek and terrace 3 is the southernmost and highest terrace. Between terrace 3 and terrace 1, a distance of approximately 400 feet, the vertical drop is approximately 30 feet.

Visual inspection of the area found no standing structures or obvious archaeological features in Area A. A small, mortared fieldstone spring house in very poor condition was found in a small swampy thicket approximately 400 feet outside of the eastern project ROW. The potential for historic archaeological resources was considered to be high because three historic structures had been identified within the project ROW by background research. The potential for intact prehistoric

FIGURE 11

Location of Terraces 1-3, Area A



remains and buried prehistoric landscapes was considered to be medium on each of the three terraces and low on the intervening slopes. The intensity of historic activity on the terraces and the possibility of significant colluvial action along the slopes between the terraces, however, were expected to decrease the possibility of finding intact prehistoric remains.

Background Research - Three potential cultural resources were identified by background research. All three of these potential resources appear as standing structures on various historic maps. No potential prehistoric sites were located by background research. The first potential resource is an early to mid-nineteenth century store and later store and post office located in Area A by tax assessments and historic maps, most notably Rea and Price (1849), Beers (1868), Hopkins (1881), and Baist (1893). The second potential resource is a mid-nineteenth century structure appearing on Beers (1868) as a "Shoe Sh[op]" and later on a 1914 topographic map as an unidentified structure that was probably last used as a tenant residence. This resource also appears on Lee (1875), Hopkins (1881), and Baist (1893). The third resource is an early twentieth century house located in Area A by informants and does not appear on any historic maps. The locations of the potential resources in Area A are shown in Figure 9. A detail of Beers' 1868 historic atlas showing the first two resources is shown in Figure 12. A summary of all the historic maps showing all three resources is given in Table 2.

The store and post office were built sometime after Amor Chandler (Jr.) received the land in 1812 and 1835, when Scharf (1888:907) notes that Chandler's store was being operated by

FIGURE 12

Detail of Beer's (1868) showing the Beaver Valley Area

Charles and Martin Palmer. It is likely that Chandler continued to operate the store through tenants as Rea and Price (1849) shows the structure as "Talley and Cloud's Store." Chandler's store operated as such into the first quarter of the twentieth century. Between 1850 and 1874, the store also began to be used as a post office. John Chandler's son, Amor H., operated both the store and the post office from 1876 until at least 1888, the last year in which Amor H. is listed in the state directories as a postmaster and butcher and when the land is sold to William S. Stokes (NCD 14-G-383).

The second potential resource (Figure 9, Table 2) appears first on Beer's 1868 atlas as a "Shoe Sh[op]" associated with the general store and post office. This association is supported by Scharf (1888:907) who notes that Lewis Talley and William Cloud, who then operated the store and post office, manufactured shoes with some other partners in connection with the store. The structure is illustrated in a number of other historic maps (Table 2), although Beer's is the only one that labels it as a shop. Baist (1893) shows the structure as belonging to George Goodley, by which time it was probably used solely as a tenant residence. George Goodley purchased the parcel containing both the store and post office and the "shoe shop" in 1889, at which time it is likely that he lived in the more substantial store and post office structure. Interviews with informants also support this assumption. One informant, Mr. Albert Mayer, remembered the structure to be a small frame tenant house that was last inhabited by black tenants and in very poor condition in the early 1920s. The structure was destroyed between 1916 and 1939

when Woodlawn Trustees, the present owner, acquired the property.

The final potential resource is an early twentieth century house structure identified by informants (Figure 9; Table 2). No historic maps, including the 1911-1916 topographic maps, show the structure. One informant, Mr. Albert Mayer, remembered a frame house built by Williard Galbreth who purchased the property in 1900. According to Mayer, the Galbreths planned to move into the store and post office structure but found the structure to be in too poor of condition to warrant repair. Galbreth then supposedly purchased the materials for a one and a half story frame structure from the Sears and Roebuck catalog and built directly behind the store and post office.

Phase I Survey Results - One historic archaeological site was located during the Phase I survey. The Chandler-Galbreth site (N-10955; 7NC-B-19) has two components, corresponding to the first and third potential resources as identified by background research. The first component of the Chandler-Galbreth site identified by the Phase I Survey was the foundation of the store and post office (potential resource 1) identified on Rea and Price (1849), Beers (1868) and a number of other historic maps (Table 2). The second component of the Chandler-Galbreth site identified was the "Sears and Roebuck" mail order house built by W. T. Galbreth and identified by background research as potential resource 3.

Potential resource 2, the "Shoe Sh[op]" on Beers' 1868 atlas, was not located by the Phase I Survey. Field reconnaissance of the area in which the structure was located by

historic maps found the area to be a thickly vegetated swamp created in part by the discharge of a pond built on Heather Hill Farms across Beaver Valley Road in 1956 (Figure 11). A field reconnaissance of this northernmost part of Area A was completed despite heavy vegetation and standing water, but no evidence of the shoe shop was located.

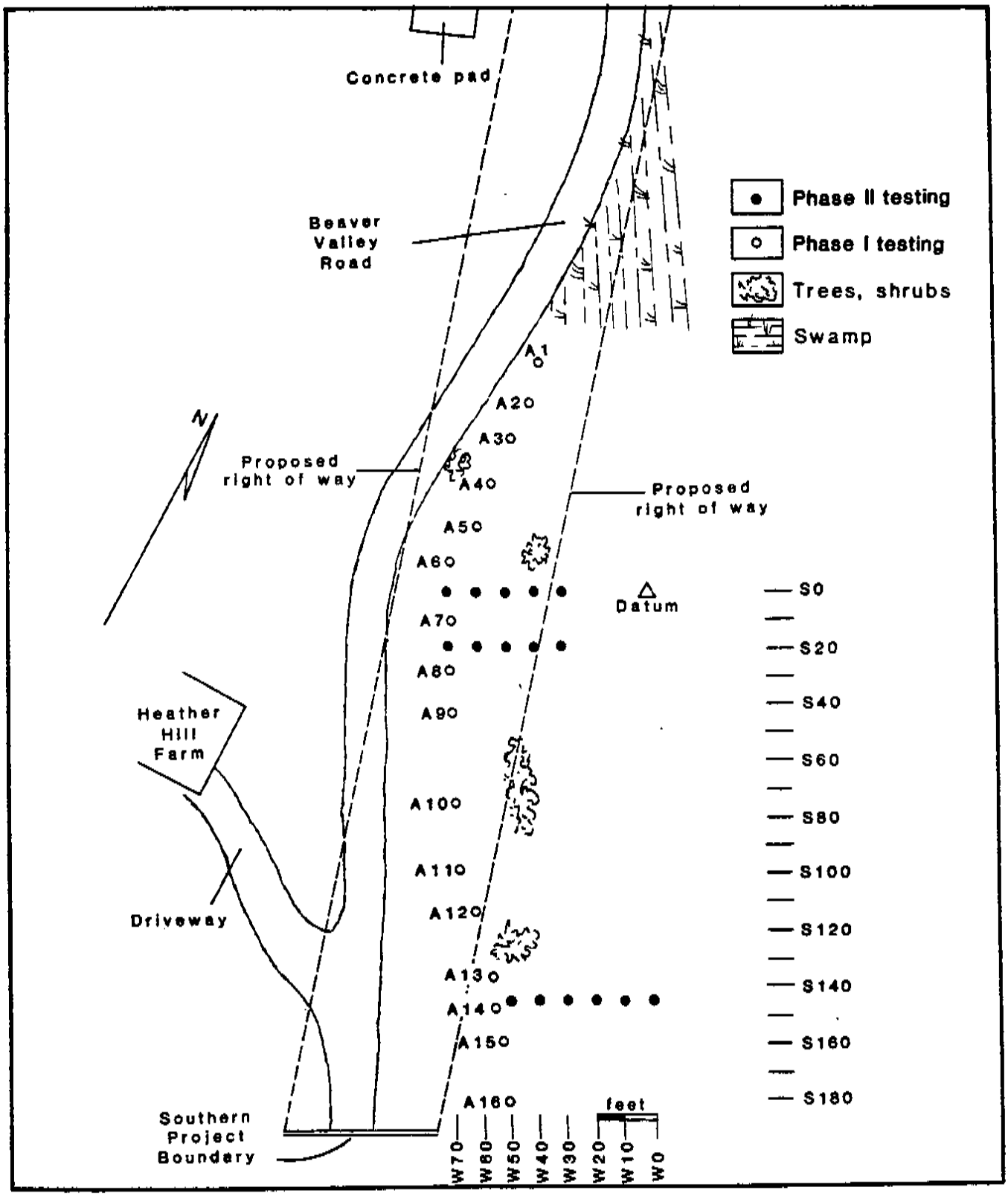
A total of 32 shovel tests and four 3 X 3 ft test units were excavated in Area A during the Phase I Survey. All three terraces and both of the intervening slopes were tested. Total artifact counts by type for all Phase I excavations in Area A are included in Appendix I. Field reconnaissance of Area A located no standing structures or obvious archaeological features on any of the three terraces or two intervening slopes. The presence of the small, deteriorated spring house east of the project area was confirmed. No surface collection was attempted as the entire area is unplowed and grass covered.

The first shovel tests excavated in Area A was a transect of 16 tests running from the first terrace south to the third terrace and southern project boundary. This first series of shovel tests are shown as Shovel Tests A-1 to A-16 in Figurel3. This transect of test excavations which ran parallel to Beaver Valley Road approximately 25 feet east of the road and along the proposed ROW tested all three of the major terraces south of Beaver Creek in Area A and the two intervening slopes.

The first terrace south of Beaver Creek in Area A was tested by Shovel Tests A-1 to A-6 (Figure 13). The interval between each of these shovel tests was 15 feet. No prehistoric artifacts were recovered. Historic artifacts were recovered from all of

FIGURE 13

Location of Phase I and Phase II Testing in Area A



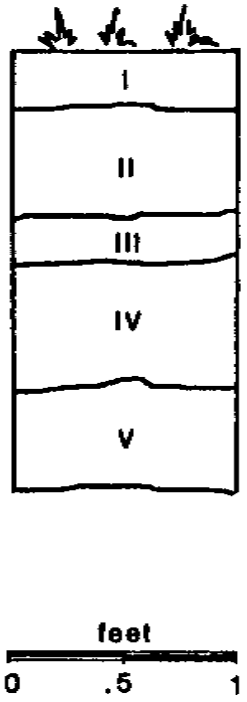
the shovel tests except Test A-1 which filled up with water after the humus was removed. This test unit is located at the edge of the swampy ground in the northernmost portion of Area A, the area in which the "Shoe Sh[op]" (potential resource 3, Figure 9) appears on Beers Atlas. The heavily decomposed organic layers uncovered as part of the humus appeared to be undisturbed, suggesting that perhaps the shoe shop was located further north, closer to Beaver Creek, than is shown on Beers Atlas (Figure 12).

Shovel Test A-3 located the first evidence of a structure on the Chandler-Galbreth site. At approximately 1.1 feet below surface, a layer of decomposed tan-gray mortar and large rock was encountered and labelled Feature A-1. Two of the rocks showed evidence of mortar, but were not in place, suggesting the possibility of a disturbed stone and mortar foundation. This rubble, probably foundation related, was overlain by approximately 0.3 foot thick layer of decomposed mortar fragments (0.85 - 1.1 feet below surface), a layer of yellow-brown clayey sands from approximately 0.25-0.85 feet below surface and a thin humus (Figure 14). No plowzone was found. The artifacts recovered from Shovel Test A-3 also suggested the presence of a structure. Fragments of nails, redware vessels, bricks, and coal were found in all strata. Excavation of this shovel test was terminated at 1.15 feet below surface.

Shovel Tests A-4 to A-6 were then excavated south of Test A-3 to test the southern portions of the first terrace. All three shovel tests recovered large amounts of historic artifacts similar to those found in Shovel Test A-3. Wire nails and nail fragments, clear window and molded bottle glass fragments, green

FIGURE 14

Profile of Phase I Shovel Test A-3



Soil Key

I Humus

II Medium grey-brown sandy silt with pockets of coarse sand and decomposed schist fragments

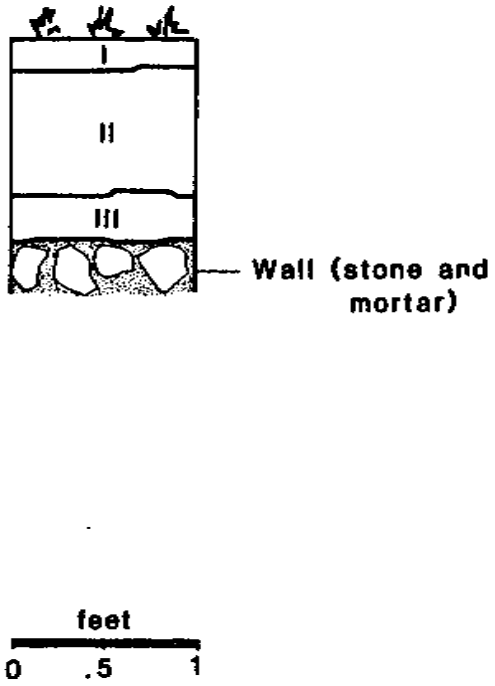
III Medium brown silt loam with small pockets of decomposed mortar. No large rocks

IV Yellow-brown sandy clay

V Brown-yellow sandy clay, sand is coarser than level IV, also higher clay content

FIGURE 15

Profile of Phase I Shovel Test A-5



Soil Key

I Humus

II Yellow-brown clayey sand, few roots: all without evidence of mortar

III Grey-tan sand with numerous decomposed mortar fragments and stains. Numerous rocks, some with mortar stains

bottle glass, and fragments of coal, coal ash, and mortar were recovered from all levels of Shovel Tests A-4 to A-6. Ceramics recovered from these tests included small fragments of undecorated whitewares and lead glazed redwares. One small nineteenth century kaolin pipe stem fragment was also recovered from Shovel Test A-5. No prehistoric artifacts were recovered.

The disturbed stone and mortar feature located by Shovel Test A-3 was not located in Tests A-4 to A-6. A typical stratigraphic sequence for this southern part of Area A is shown in the profile of Shovel Test A-5 (Figure 15). The humus was relatively thin in this test, approximately 0.3 foot thick. Below this was an approximately 0.45 foot thick layer of medium gray-brown sandy silt with numerous pockets of coarse sands and small decayed schist fragments. This second level extended from approximately 0.3 to 0.95 foot below ground surface. The third strata encountered was a medium brown silt loam with small pockets of decomposed mortar extending from approximately 0.75 to 0.95 foot below surface. Level four was composed of a yellow-brown sandy clay from approximately 0.75 to 0.95 foot below surface. Level V was a brown-yellow grained sandy clay at approximately 1.5 to 2.0 feet below surface, the limit of excavation. This deepest strata contained a much more coarsely grained sand and was more clayey in nature. No plowzone was encountered. Historic artifacts were recovered from all levels of Shovel Test A-5. All of these artifacts, with the possible exception of one small sherd of slip-decorated redware, date from the mid-to-late nineteenth century to early twentieth century. Other artifacts recovered included fragments of undecorated

whitewares, clear and green molded late nineteenth and twentieth century bottles, wire nails, coal, and coal ash. These artifacts are typical of those found in the other shovel tests excavated in terrace 1.

A measured 3 X 3 ft test unit was then excavated approximatley one foot south of Shovel Test A-3. This unit, labelled Test Unit A-1, was excavated to determine the extent of the disturbed mortar and stone feature found in the shovel test and to determine if any intact portions remained. No intact portions, however, were located by this unit and no orientation to the rubble was seen. At 1.25 feet below surface, the stone and decomposed mortar rubble was located.

A humus (0-0.3 foot below surface) and a thick layer of medium brown mottled sandy loam fill (0.3-1.5 feet below surface) were located above the feature in this test unit. The second level of fill was heavily mottled with tan pockets of mortar and contained numerous nineteenth and early twentieth century historic artifacts. Numerous large and small rocks, many of them broken and with evidence of mortar, were also seen. Diagnostic artifacts recovered from this level included fragments of molded and gaudily decorated early twentieth century whitewares; glazed and unglazed utilitarian earthenwares; brown banded stonewares; and a mid-to-late nineteenth century pharmaceutical bottle. Other artifacts recovered included the usual assortment of window glass; clear, amber, and green bottle glass; wire nail fragments; and coal. None of the artifacts recovered from these levels above the stone and mortar feature date before late nineteenth

century and were most likely deposited during the razing of the structure in the late 1930s or early 1940s.

Test Unit A-1 was then expanded two feet to the south to include Shovel Test A-3 in order to determine if the displaced stone and mortar feature located in Shovel Test A-3 was part of the same deposit uncovered in Test Unit A-1 and to determine an orientation to the feature. A plan of the expanded Test Unit A-1 is shown in Figure 16. As can be seen in this figure, the bottom of the unit was composed of a uniform level of displaced rocks and pockets of decayed mortar, probably the remains of a severly disturbed foundation (Feature A-1). No orientation was seen.

The soil along both sides of the feature were the same type of sandy loam, but the soil along the southern edge was much more loosely packed and heavily pocketed with large air spaces. This feature was interpreted as possible evidence of an interior portion of a structure and strengthened the association of Feature A-1 with a disturbed foundation. The area north of the feature, presumably the exterior, was troweled off but no evidence of a builder's trench was found.

While troweling south of Feature A-1, presumably in the interior of the structure, a large fragment of a brown stoneware bottle was found (Plate 4). Along one broken edge the letters "WM __RE" are found. The middle letters are illegible but the spacing suggests two letters. This inscription suggests that the bottle was manufactured by William Hare of Wilmington. Hare operated a pottery at 212 French Street in Wilmington and is listed in the city directories as a potter from 1845 to 1885. Hare produced both redwares and stonewares and is known

FIGURE 16

Floor Plan of Phase I Test Unit A-1

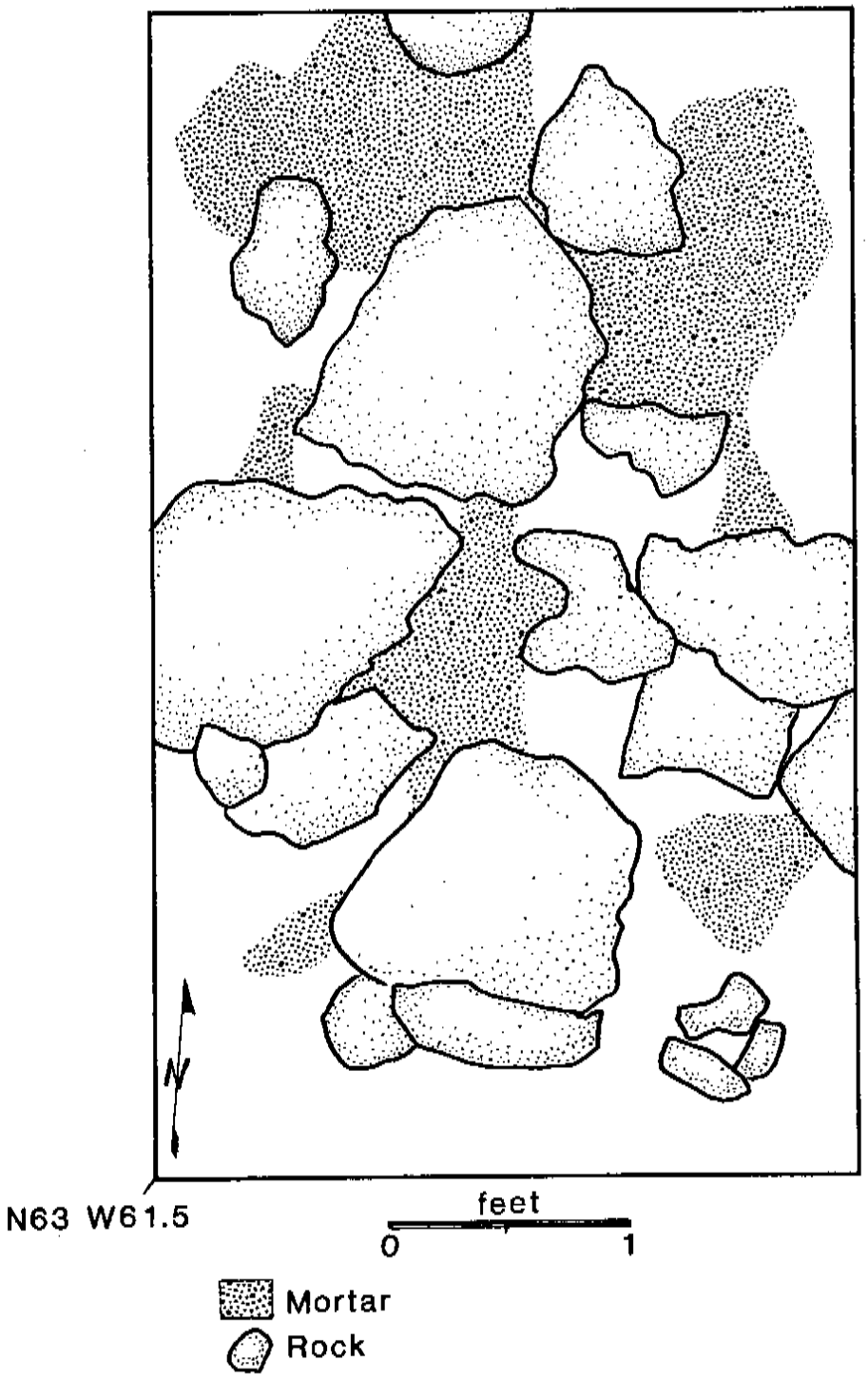
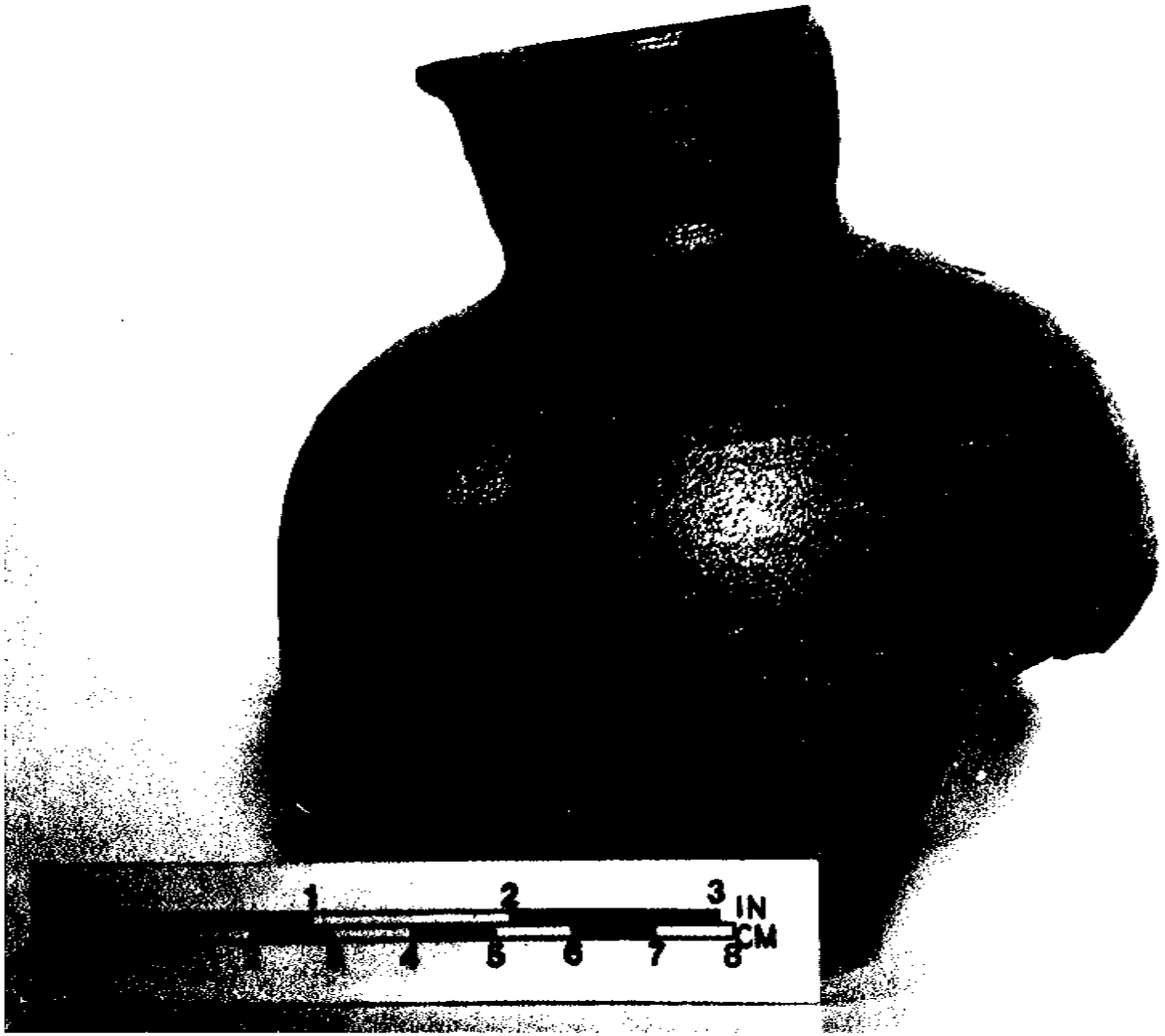


PLATE 4

Reconstructed William Hare Stoneware Bottle from Feature A-1, Test Unit A-1, A. Chandler/Galbreth Site (N-10955, 7NC-B-19)



particularly for his marked stoneware bottles, of which this artifact is probably an example. The maker's mark on this artifact is very similar to that of one intact William Hare stoneware bottle, owned by Sue Fox (Plate 5).

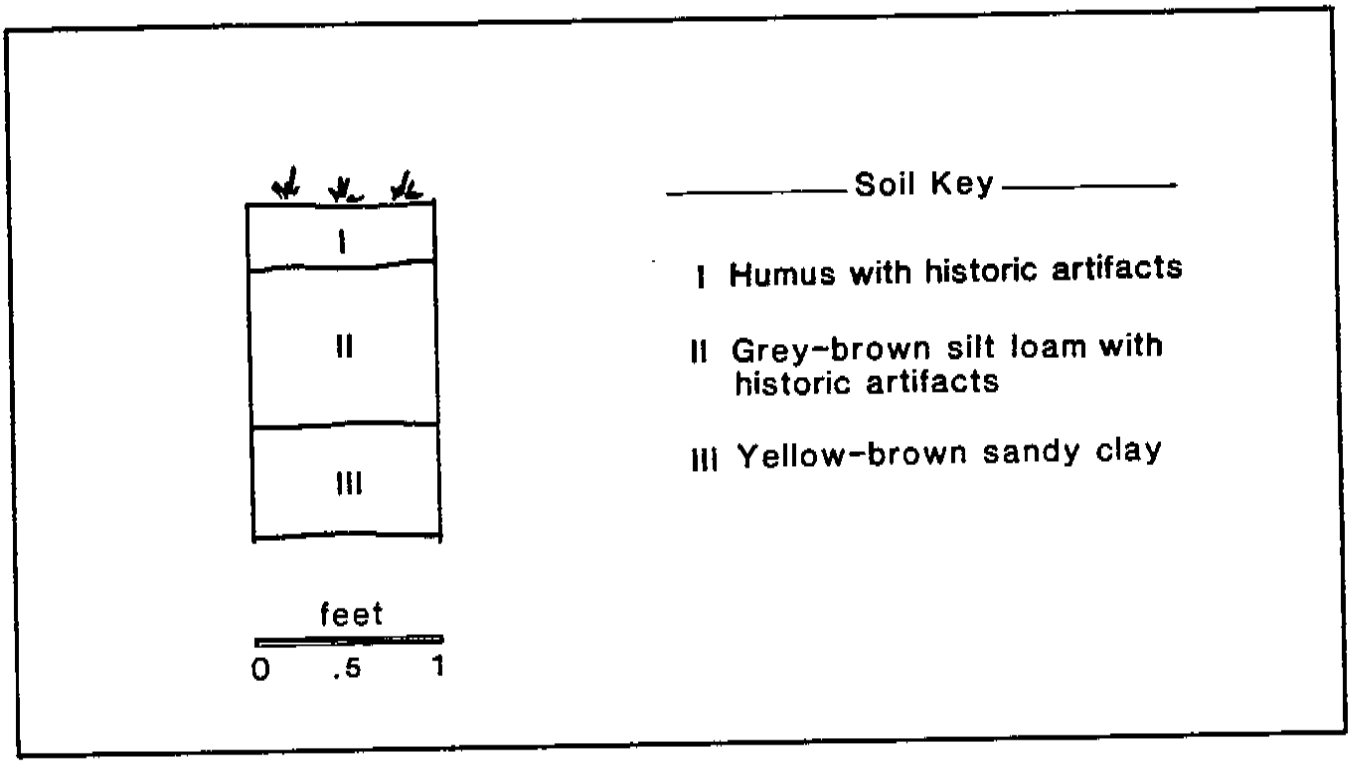
An additional shovel test was excavated approximately 7 feet north of Shovel Test A-3, equidistant between Shovel Tests A-3 and A-2. This additional shovel test was excavated to determine if the structure extended further to the north and was missed by the original 15 foot interval. This shovel test was excavated to a depth of 0.80 feet when a large decomposed mortar stain similar to that seen in Shovel Test A-3 and Test Unit A-1 was encountered. The shovel test was then enlarged to a 2 X 2 ft unit to determine if the stain was associated with a foundation. This 2 X 2 ft unit was labelled test unit A-2 and was excavated by natural levels to a depth of 2.0 feet below surface. No intact foundation was located. The mortar stain continued to a depth of 1.7 feet and contained numerous large rocks, revealing an area of disturbed mortar and rock rubble similar to that seen in Test Unit A-1. None of these rocks showed evidence of mortar and are probably related to the destruction and subsequent fill of the structure. Historic artifacts recovered from this unit consisted of wire nails, nail fragments, and numerous pieces of window glass. The vertical distribution of artifacts between natural soil levels was consistent. No historic ceramics or prehistoric artifacts were recovered. Having located evidence of one structure, this test unit completed the Phase I testing of the first terrace of Area A.

PLATE 5

Complete William Hare Stoneware Bottle

FIGURE 17

Profile of Phase I Shovel Test A-8



The second terrace of Area A begins approximately 300 feet south of Beaver Creek and the slope between terrace 1 and terrace 2 is very gentle, approximately five vertical feet in 60 feet. A total of 13 shovel tests and one 3 X 3 ft test unit were excavated in the second terrace as part of the Phase I Survey. The first three shovel tests excavated in the second terrace were located along the same transect as Shovel Tests A-1 to A-6 in terrace 1. These three shovel tests were labelled A-7 to A-9 and are located in Figure 13. Shovel Test A-9 was located along the slope between terrace 2 and 3 (Figure 13).

A typical stratigraphic sequence in terrace 2 can be seen in the profile of Shovel Test A-8 (Figure 17). The stratigraphy of

the second terrace was similar to that of terrace 1. A thin, 0.35 foot thick humus was underlain by a 0.85 foot thick layer of gray-brown silt loam (0.35-1.2 feet below surface). This layer was underlain by a yellow-brown sandy clay from 1.2-1.8 feet below surface (Level 3, Figure 17). Particle size increased with depth, particularly in the second silt-loam level where numerous small, decayed schist fragments were found. This terrace was also never plowed as no plowzone was identified.

No intact prehistoric or historic cultural resources were located by Shovel Tests A-7 to A-9 in terrace 2. No prehistoric artifacts or buried landscapes were located. The density of historic artifacts recovered in these tests decreased sharply towards the south. Shovel Test A-9, the southernmost test, contained only one artifact, a small and heavily weathered pearlware sherd.

Two transects of 10 additional shovel tests were then excavated in terrace 2. These shovel tests were placed along east-west transects between Tests A-6 and A-8. The location of these two transects and the total historic artifacts from each of these additional tests are shown in Figure 18. Total structurally-related artifacts (South 1977:95) for each of these shovel tests and the original transect of shovel tests (A-6 to A-8) are shown in Figure 19. These 10 additional shovel tests were labelled according to a datum established in the northeast corner of the terrace and outside of the ROW. Thus Shovel Test S20W30 was located 20 feet south and 30 feet west of datum. All further Phase I/II excavations in Area A were measured from this datum.

FIGURE 18

Location of all Phase I Test Excavations and Total Historic Artifacts by Phase I Shovel Testing in Terraces 2 and 3, Area A

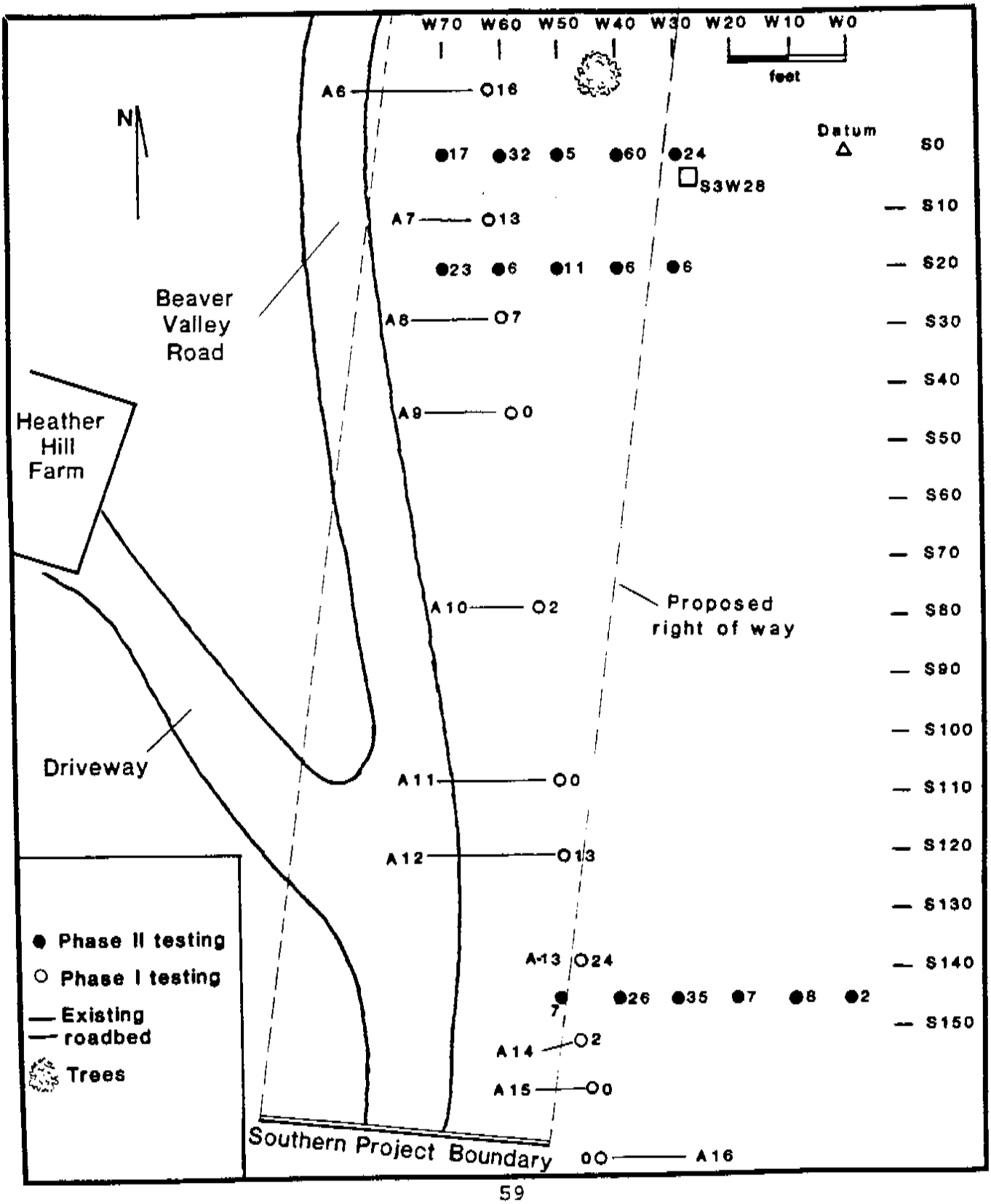


FIGURE 19

Total Structurally-Related Historic Artifacts by Phase I and Phase II Shovel Testing in Terrace 2 and 3, Area A

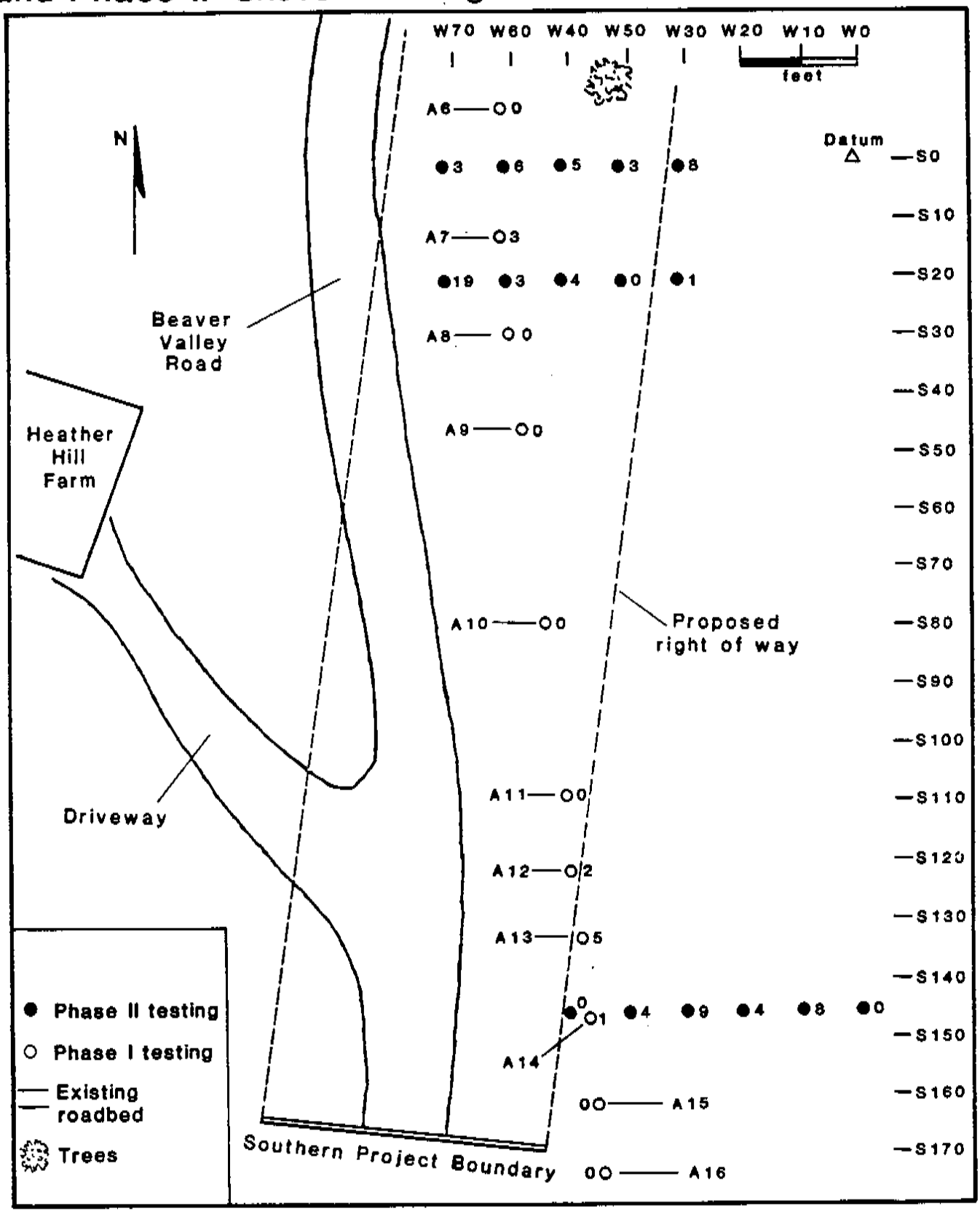
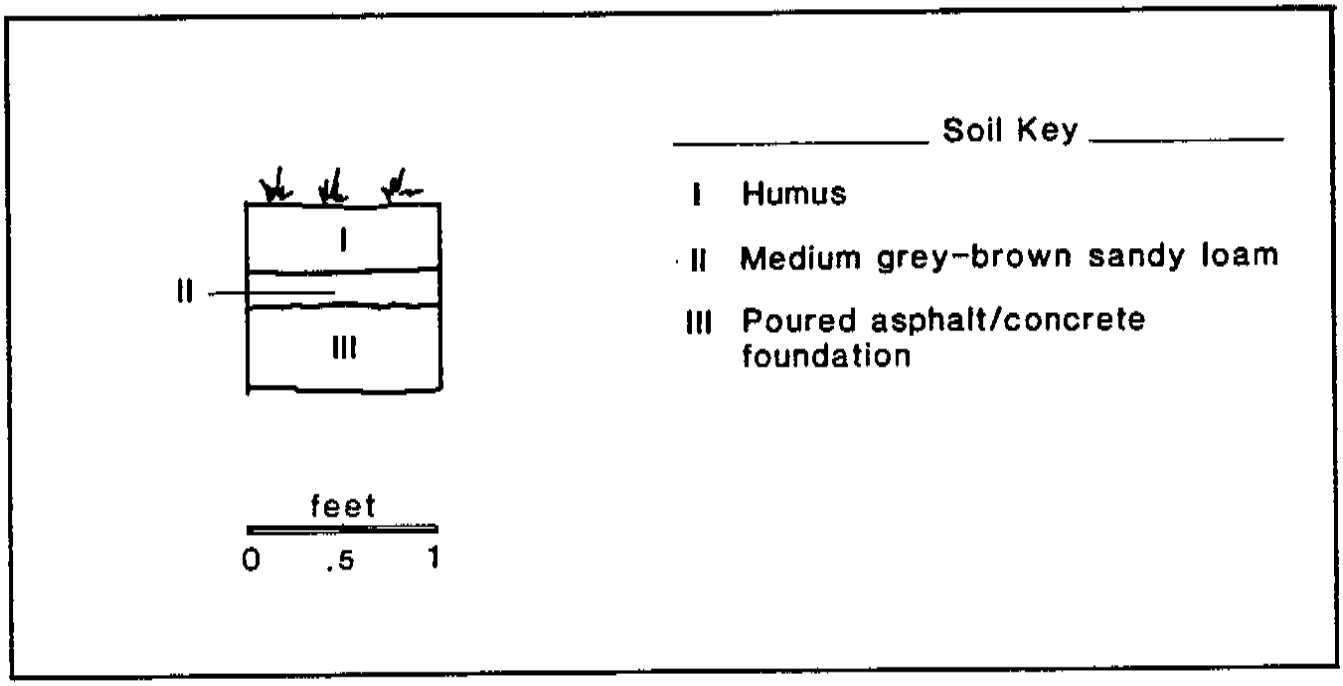


FIGURE 20

Profile of Phase I Shovel Test S0 W30, Area A



Shovel Test S0W30 located part of a dark, poured concrete-macadam foundation at 0.55 foot below surface. No decomposed mortar or displaced rock similar to that seen in terrace 1 was found. This was the only cultural resource identified by the shovel test grid in terrace 2. The location of shovel test S0W30 is shown in Figure 18. The poured foundation found in Shovel Test S0W30 was overlain by a relatively simple stratigraphy (Figure 20). Immediately above the foundation was a 0.20 foot thick layer of medium gray-brown sandy loam from 0.35-0.55 foot below surface (Level II, Figure 20). Above this was a thin humus. Artifacts recovered from Shovel Test S0W30 included fragments of window glass, wire nails, and twentieth century terra cotta drainage pipe. No ceramics or other diagnostic artifacts were recovered.

The stratigraphy identified in S0W30 was very similar to that seen in the other areas of terrace 2 sampled by the shovel test grid. Artifact density over the entire terrace remained relatively constant with structural remains decreasing towards the south. Structural remains comprised mainly of fragments of flat, clear glass and wire nails comprised approximately 90% of the artifacts recovered. Other artifacts recovered in terrace 2 included numerous fragments of undecorated and transfer-printed whiteware, unifacially and bifacially lead glazed redwares of both utilitarian and refined types, and green and amber bottle glass. No pearlware or any other ceramics earlier than whitewares were found. This grid of 13 shovel tests completed the Phase I Survey of terrace 2.

No further evidence of the foundation segment located in Shovel Test S0W30 was encountered in any of the other shovel tests excavated in terrace 2. Each of the three shovel tests excavated immediately surrounding test S0W30 (Figure 18) failed to locate the foundation, although window glass and wire nails were found in all levels of each of the tests.

A 3 X 3 ft test unit was then excavated immediately east of Shovel Test S0W30 to locate the dark gray-black concrete-macadam foundation uncovered in the shovel test. The location of the Test Unit S3W28, and Shovel Test S0W30 are shown in Figure 18. At 0.35 feet below surface an intact alignment of small mortared rocks was located. At 0.55 feet below surface these small mortared rocks were found to be part of the deeper and much more substantial concrete-macadam wall. The entire foundation was oriented east-west and was overlain by a thin humus and a layer

of gray-brown sandy loam from 0.20-0.55 feet below surface.

The mortar used in this wall was different than that encountered in terrace 1, and along with the construction of the foundation suggested a different and probably much later structure than that located on the first terrace. The mortar on terrace 2 was much lighter in color and more finely grained. The concrete-macadam portion of the wall in terrace 2 was observed to be approximatley 0.4 feet thick. The vertical extent of the wall was not determined as excavation was stopped at 0.75 feet below surface. One sherd of a slip-decorated refined redware and a porcelain button were recovered from the light brown silt loam along the interior edge of the foundation at approximately 0.45 feet below surface. Other artifacts recovered from Test Unit S3W28 included clear window and bottle glass fragments and terra-cotta drain pipe fragments.

A floor plan of Test Unit S3W28 at approximately 0.60 feet below surface showing the orientation of the concrete-macadam wall is given in Figure 21. Two distinct soils were recognized south of the wall, suggesting the exterior of the structure (Figure 21). The first soil recognized was a 0.6-1.0 foot wide band of light brown silty loam with pockets of coarse sand. South of this was a medium brown sandy silt with numerous pockets of coarse sands and gravels. Excavation was stopped at this level as the difference between the two soils suggested a possible builders' trench. Later excavation, however, did not locate any builders' trench. This test unit completed the Phase I investigation of the second terrace in Area A.

FIGURE 21

Floor Plan of Phase I Test Unit S3 W28, Area A

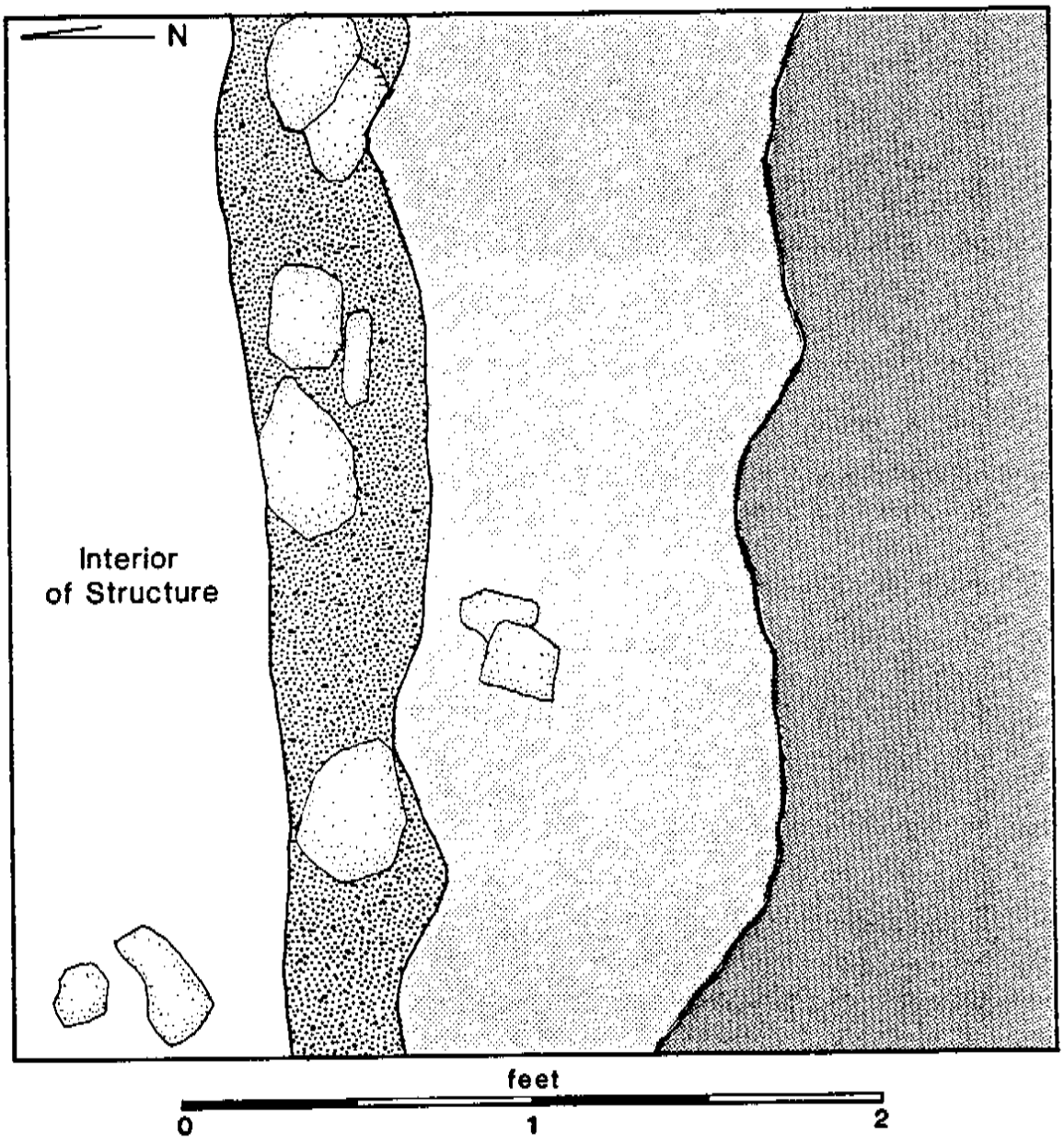
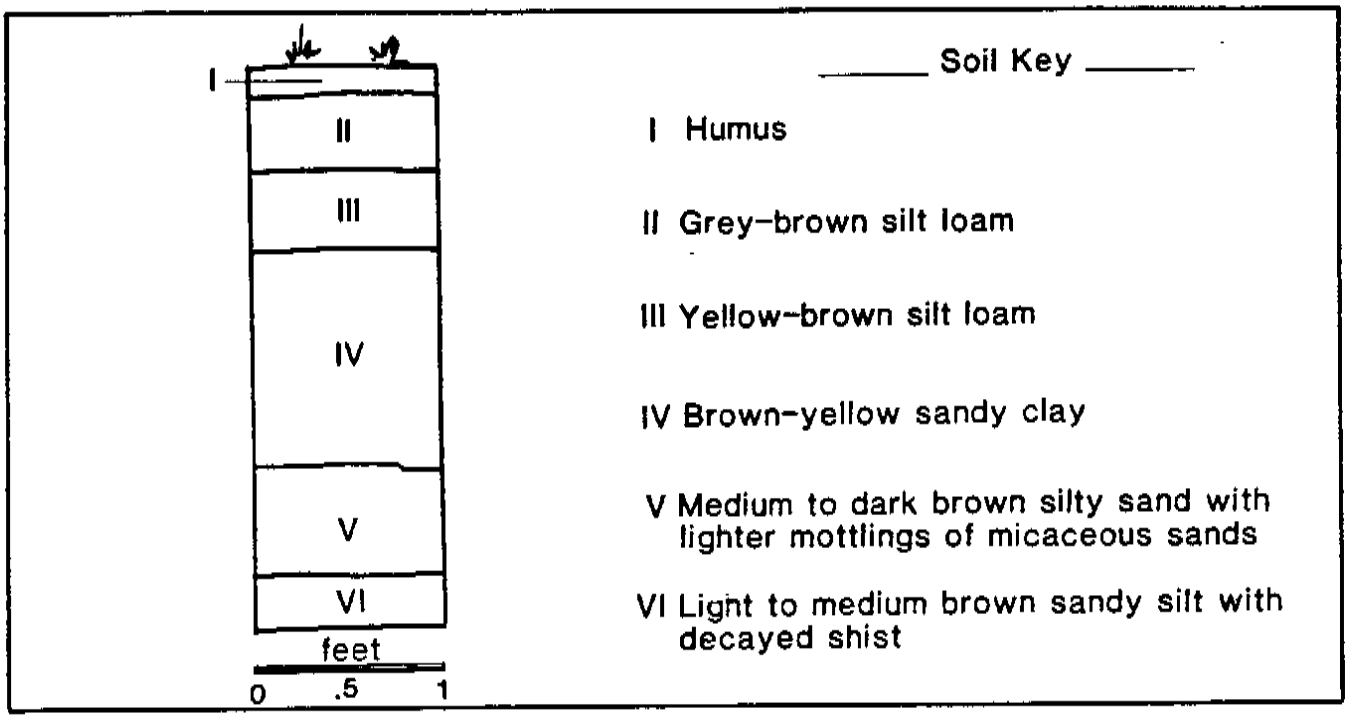


FIGURE 22

Profile of Phase I Shovel Test A-15



Along the original transect of sixteen shovel tests, Tests A-10 to A-16 sampled the slope between terraces 2 and 3 (Figure 13). The interval between A-10 and A-11 along the slope between terrace 2 and 3 was 40 feet. The interval between A-11 and A-16 along the third terrace was 20 feet. No cultural features were identified in terrace 3 or the slope towards terrace 2.

A typical stratigraphic sequence in terrrace 3 can be seen in the profile of Shovel Test A-15 given in Figure 22. A humus was underlain by a gray-brown silt loam from 0.15-0.55 feet below surface and a yellow-brown silt loam from 0.55 to 1.0 feet below surface. Below this was a brown-yellow sandy clay from 1.0 to 2.15 feet below surface (Level IV, Figure 22). From 2.15-2.75

feet was a sterile medium to dark brown silty sand with lighter mottlings of micaceous sands (Level V, Figure 22). Below this was another sterile level, a light to medium brown sandy silt with numerous fragments of decayed schists up to 6 inches long from 2.75-3.0 feet below surface (Level VI, Figure 22).

Historic artifacts were from the upper levels of all the shovel tests excavated in terrace 3. Compared to terraces 1 and 2, however, fewer artifacts were recovered. As with the slope between terrace 1 and 2, the slope between terrace 2 and 3 contained very few historic artifacts and encountered sterile soils at less than 1 foot below surface. This distribution is due in part to colluvial action and to the distance from the locus of historic activity along the first terrace. Shovel Tests A-9 and A-10 recovered one artifact apiece, and Test A-11 at the base of terrace 3 located 2 wire nails, 6 fragments of window glass, 1 olive bottle glass fragment, 2 oyster shells, coal, and 1 heavily weathered sherd of late nineteenth century salt-glazed stoneware. Shovel Tests A-11 to A-16 recovered similar assemblages, with small, oxidized nail fragments, window glass, and coal comprising the bulk of the artifacts recovered. Few ceramics were recovered on the third terrace, although one small piece of pearlware was found in Shovel Test A-9 and one equally small and heavily weathered whiteware sherd was found in Shovel Test A-13.

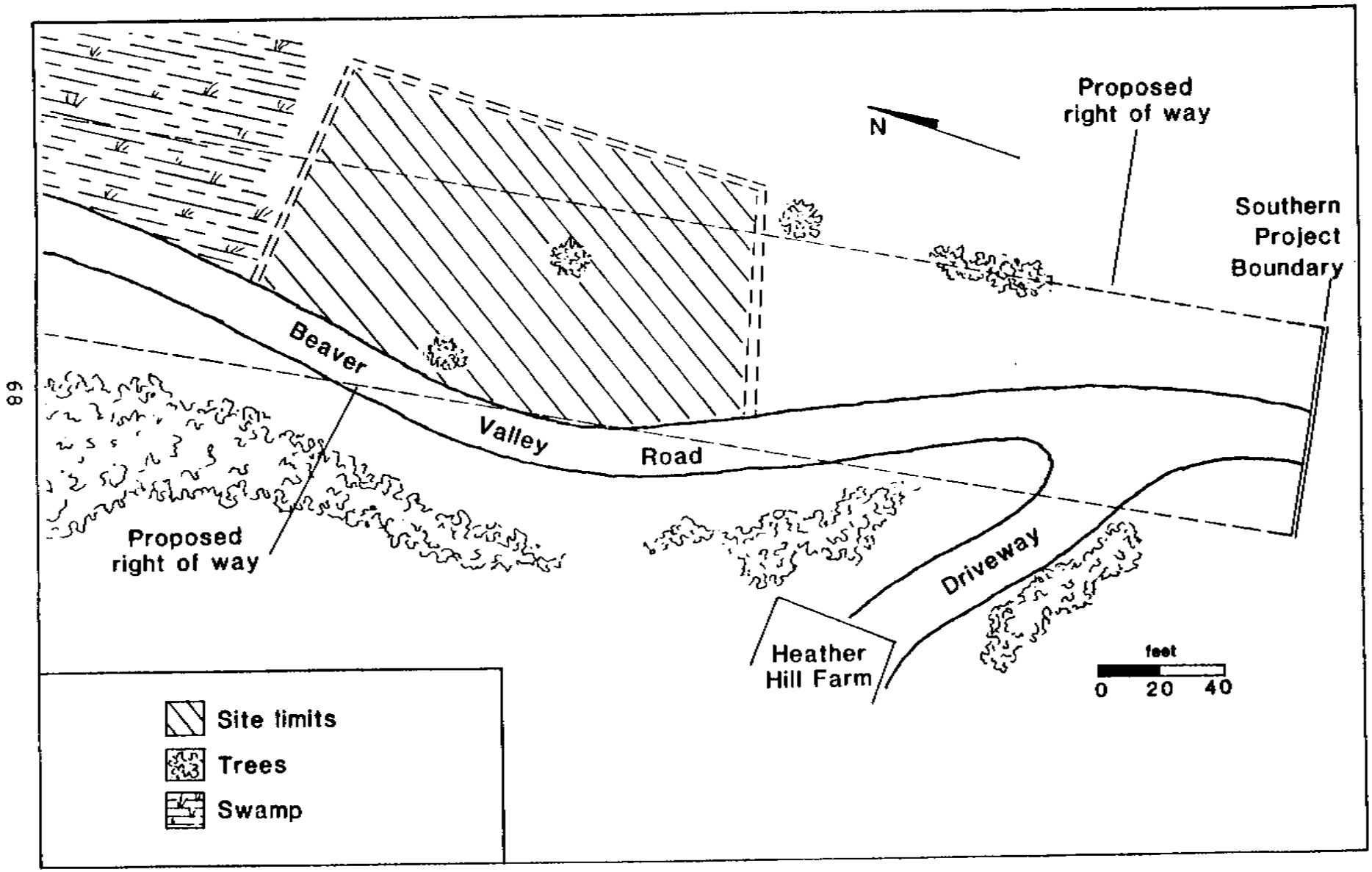
A grid of 6 additional shovel tests was then excavated in terrace 3. The location of these 6 tests along the south 145 line is shown in Figure 18. These additional tests were excavated to test between the original transect of shovel tests

and to test the remainder of the terrace. Few historic and no prehistoric artifacts were recovered from this terrace. The distribution of artifacts within the terrace remained relatively constant and showed no significant patterns as can be seen in the distribution of total historic artifacts from all of the Phase I shovel tests in terrace 3 in Figure 18. Small fragments of coal, utilitarian redwares, late nineteenth century whitewares, wire nails, clear and amber molded bottle glass, and window glass were by far the most commom artifacts recovered. No intact structural remains were located by any of the Phase I shovel tests on the terrace. Very few structurally-related artifacts were even recovered from the terrace as can be seen in Figure 19. No pearlwares or other earlier ceramics were located. The stratigraphy identified for other areas in terrace 3 was very similar to that identified in shovel test A-15 (Figure 22).

The limits of the Chandler-Galbreth site (N-10955; 7NC-B-19) as indicated by the Phase I Survey are shown in Figure 23. The site extends from approximately 280 feet south of Beaver Creek along the east side of Beaver Valley Road to approximately 360 feet south of the Creek and the beginning of terrace 2. These limits are based on the distribution of structurally-related artifacts within the original series of shovel tests and the two grids of tests excavated in terraces 2 and 3. These limits correspond to those suggested by background research, in particular deed research that shows the southern limit of the Chandler/Galbreth property to be approximately 400 feet south of Beaver Creek. Because artifacts were recovered from intact

FIGURE 23

Limits of the A. Chandler/Galbreth Site (N-10955, 7NC-B-19)



contexts and intact structural remains were located, a Phase II study was recommended for the site. A description of the Phase II survey is included later in this report.

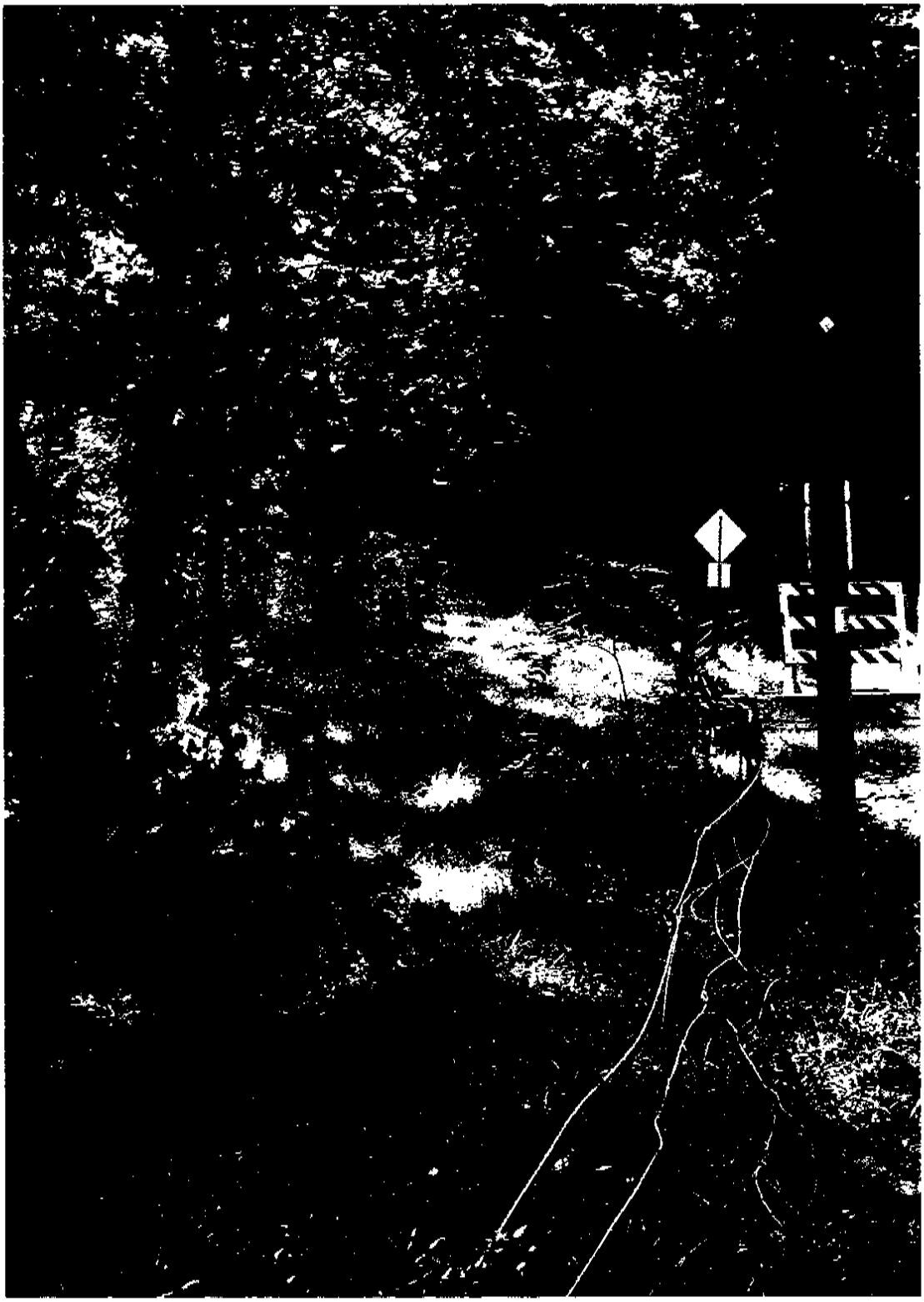
AREA B: SOUTH OF BEAVER VALLEY ROAD AND NORTH OF BEAVER CREEK

Area B is a narrow strip of floodplain between Beaver Valley Road to the north and Beaver Creek to the south (Plate 6). Visual inspection of the area found no standing structures or obvious archaeological features. The potential for historic archaeological sites was considered to be high. The potential for intact prehistoric remains and buried historic and prehistoric landscapes was considered to be low due to flood disturbances, including the flood of 1843 that wiped out a number of mills in the area. In any areas not affected by violent alluvial action, however, the potential for intact prehistoric remains was assumed to be high.

Background Research - The only potential cultural resource identified by background research in this area was a house indicated by a 1914 topographic map made for the present owners, Woodlawn Trustees (Figure 10). The structure was probably constructed during the period between 1893-1914 as it does not appear on Beers' (1868), Hopkins (1881), or Baists' (1893) atlases. Two informants confirmed the location of the structure as indicated on the 1914 map. According to both informants, the structure was a turn-of-the-century tenant house last inhabited by blacks. A 1911 topographic map prepared for the current owners, Woodlawn Trustees, shows the structure as the "Sauber" house. One informant remembers the structure as being extremely

PLATE 6

Area B, Looking West, June 1986



dilapidated in the early 1920s. The names of any of the tenants are unknown and the existence of the structure is not recorded in any of the deed transactions for the property. The structure was probably removed in 1939 when Woodlawn Trustees acquired the land from Alice G. Highfield (NCD F-41-490).

Phase I Survey - A total of nine shovel tests and three 3 ft X 3 ft test units were excavated within the ROW in Area B (Figure 24). No prehistoric artifacts were located and no intact prehistoric or historic subsurface landscapes were identified. All of the shovel tests revealed a similar stratigraphy of alluvially deposited silty sands on top of sterile, coarse-grained clayey sands and heavily worn pebbles and cobbles. These sterile clayey sands begin at approximately 2.5 feet below surface and represent the in situ weathering of local geologic strata. The profile of Shovel Test B-2 illustrates a typical stratigraphic sequence in Area B (Figure 25). The earliest diagnostic historic artifacts recovered from Area B were mid-to-late nineteenth century blue transfer-printed whiteware fragments recovered from all strata down to the sterile clayey sands and gravels. No prehistoric or earlier diagnostic historic artifacts were recovered, although all soils were screened through 1/4 inch mesh. Other types of historic artifacts recovered in Area B include clear and amber bottle glass fragments, refined and coarse redware sherds, wire nails and nail fragments, brick fragments and coal ash. Such late nineteenth to early twentieth century artifacts were found in all strata down to the sterile clayey sands. Given the nature of the fine-grained sands and silty sands seen in all of the artifact-bearing strata and the

fact that nineteenth century ceramics were found equally distributed through all non-sterile levels, it is likely that alluvial action has scoured this strip of floodplain of all earlier cultural remains.

Shovel Test B-3 located the site of the pre-1914 tenant structure identified in the 1914 Woodlawn map as the Sauber residence. The location of the structure was later confirmed by informants. This shovel test encountered a thin, 0.2-0.3 foot thick layer of brick and mortar fragments at approximately 0.5 foot below surface. A 3 ft X 3 ft test unit, Test Unit B-1, was then put in immediately east of the shovel test to determine the extent of this brick and mortar layer. This unit was later expanded to a 5 ft X 3 ft unit to include Shovel Test B-3. The location of Test Unit B-1 is shown in Figure 24.

Test Unit B-1 was excavated according to the natural stratigraphy to a maximum depth of 2.0 feet. A profile of Test Unit B-1 is shown in Figure 26. The broken brick, rock, and mortar layer was located and sectioned. No evidence of an intact foundation was found. The broken brick and mortar lens identified in the shovel test was found to be part of a larger brick, mortar, and rock filled depression. Extending from 0.5 to 1.3 feet below surface, this level contained numerous small brick, wire nail, transfer-printed whiteware, coarse and refined redware, window glass fragments, and mortar stains. An early twentieth century canning jar base was recovered from the deepest part of the deposit suggesting the degree of disturbance sustained when the structure was destroyed. This broken, brick,

FIGURE 24

Location of all Phase I Shovel Tests and Test Units in Area B

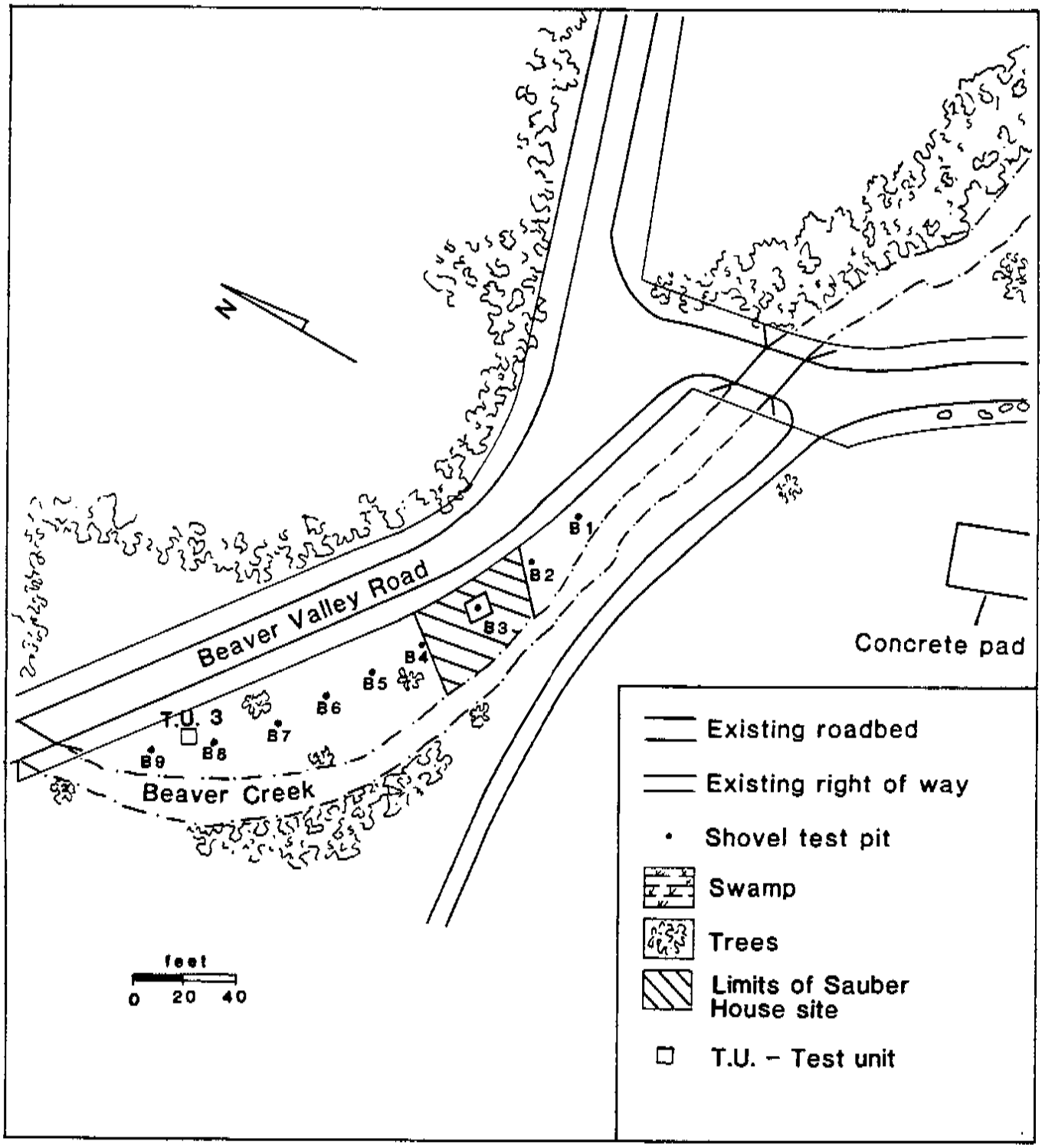
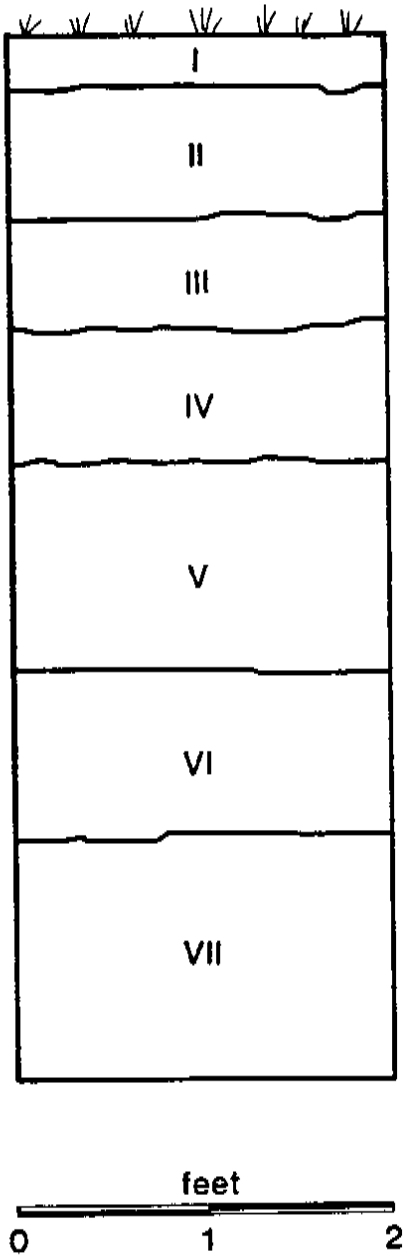


FIGURE 25

Profile of Phase I Shovel Test B-2

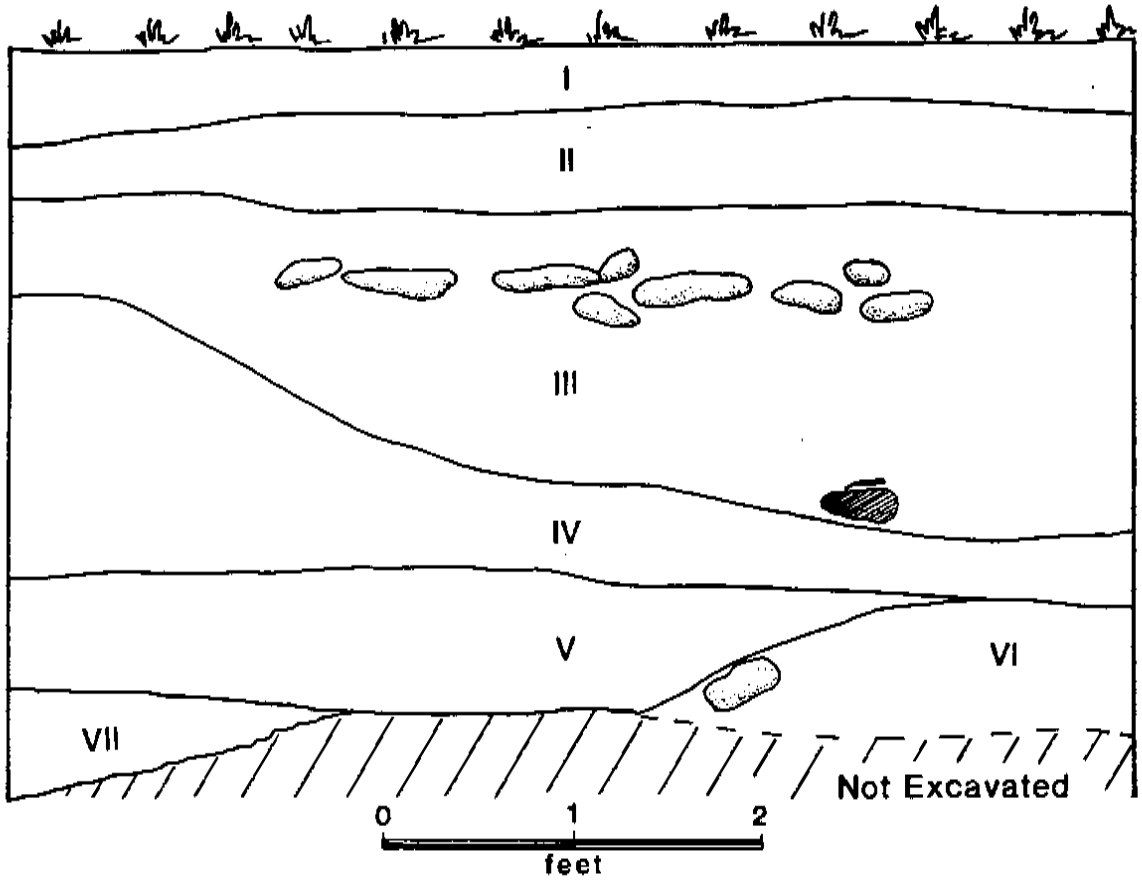


Soil Key

I	Humus
II	Medium brown silty sand
III	Light brown-tan silty sand with more sand content than level II, almost pure sand
IV	Orange-light brown mottled clay with some coarse sand (probably fill)
V	Dark brown sandy silt
VI	Brownish-yellow sandy clay with much coarse sand and large rocks (sterile soil)
VII	Dark brown-gray-orange moist sandy clay (sterile soil)

FIGURE 26

Profile of Phase I Shovel Test B-1



Soil Key

I Humus
II Medium to dark brown-tan mottled silty fine-grained sand
III Unconsolidated coarse grained sand with large rocks mortar stains and brick fragments
IV Medium brown slightly sandy clay
V Light brown slightly sandy silt (sterile soil)
VI Yellowish-brown coarse grained sand (sterile soil)
VII Gray-orange-brown mottled clayey silt (sterile soil)

Rocks

Mortar and nail and glass fragment (jar base)

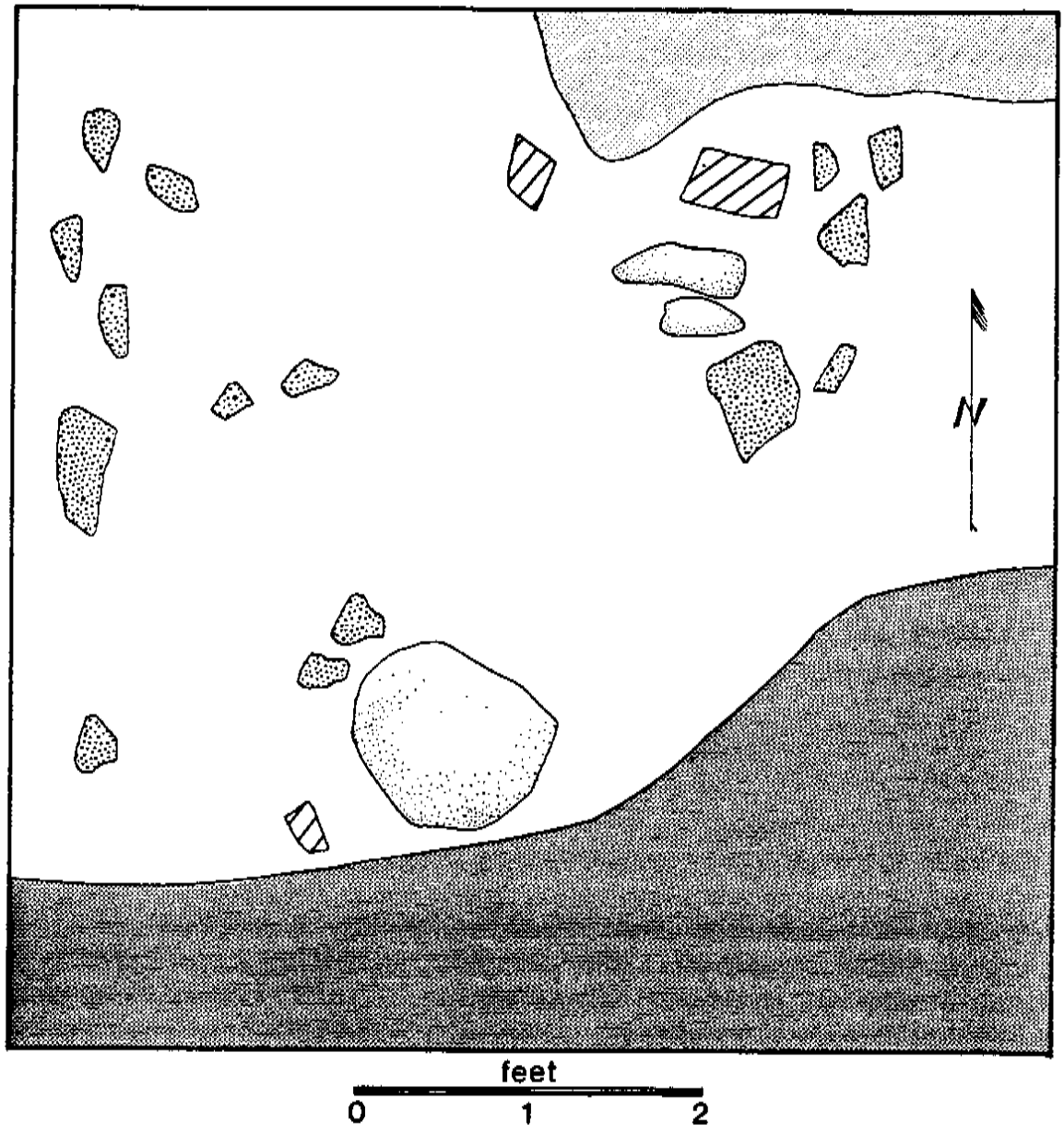
rock and mortar feature is shown as Level III in Figure 26. The matrix of the depression was composed of coarse, unconsolidated sands, probably deposited as fill. None of the rocks found in the depression showed any evidence of mortar and no builders trench was found. Four additional natural levels (Levels IV-VII, Figure 26) were excavated in Test Unit B-1 of which the deepest three were sterile. No earlier diagnostic artifacts were recovered.

A second 3 X 3 ft test unit was then put in south of the Shovel Test B-3 to determine if any intact portions of the foundation existed. The location of Test Unit B-2 is noted on Figure 24. No intact portions of a foundation were found. At approximately 0.6 feet below surface a thin, 0.2-0.3 foot thick lens of broken brick and mortar in a matrix of coarse sands corresponding to that found in Shovel Test B-3 and Test Unit B-1 was found. The stratigraphy of Test Unit B-2 is shown in Figure 25. The thin brick and mortar band did not extend over the entire unit, thus one edge of the depression was located. A floor plan of Test Unit B-2 showing the southern extent of the mortar and brick filled depression is shown in Figure 27.

No other remains of the pre-1914 tenant structure were located. Based on the results of the Phase I Survey, the site was registered with the BAHP as the Sauber House site (N- 11074, 7NC-B-20). Given the nature of the shallow mortar and brick rubble filled depression located by Shovel Test B-3 and exposed in Test Units B-1 and B-2, it is likely that the destruction of the Sauber tenant site in the 1930s-40s heavily disturbed any archaeological remains.

FIGURE 27

Floor Plan of Phase I Test Unit B-2



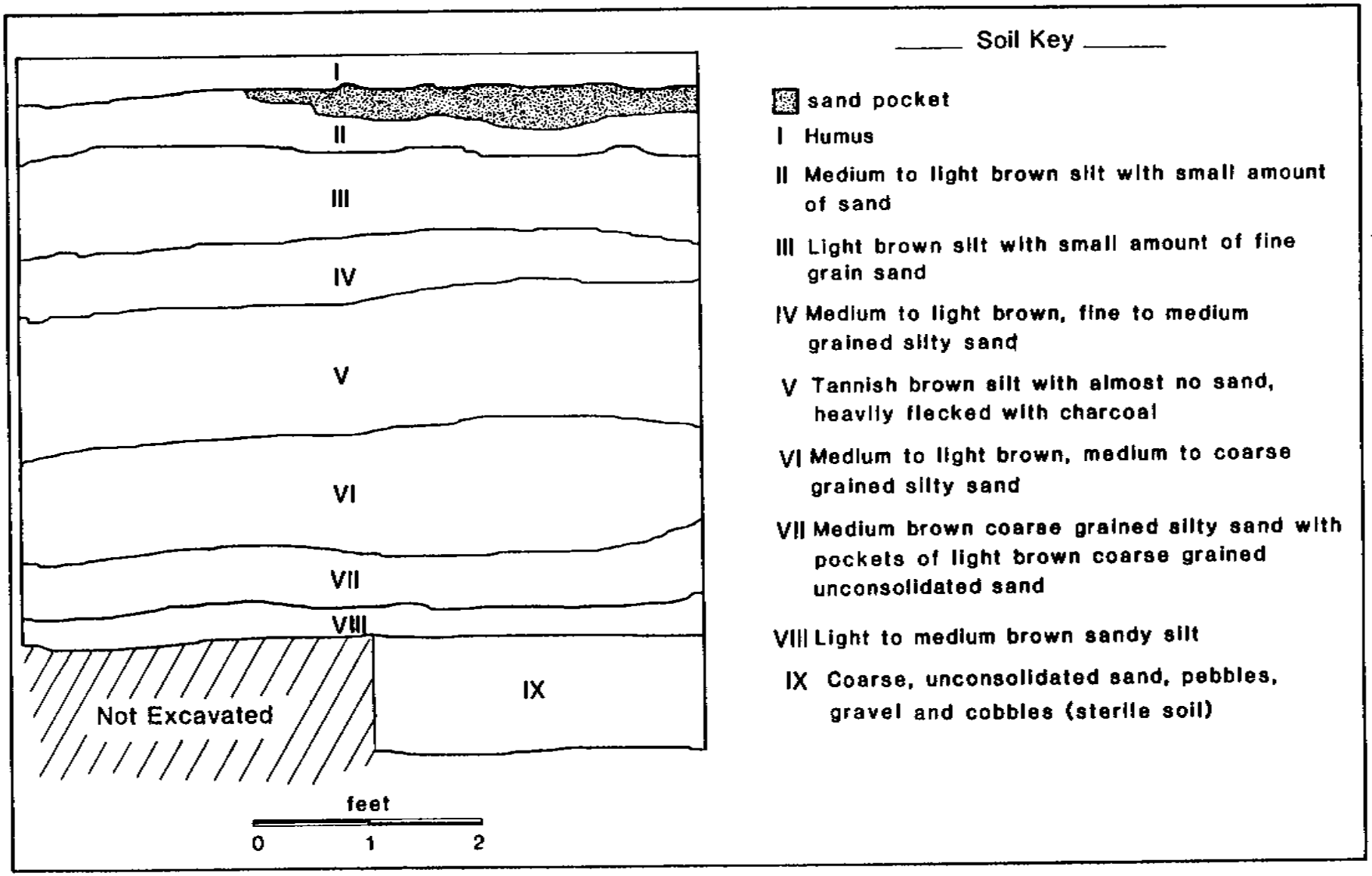
A third 3 X 3 ft test unit was excavated to establish firm vertical control over the alluvial statigraphy of Area B and to further test for any intact prehistoric or historic buried landscapes. The profile of the east wall of Test Unit B-3 is shown in Figure 28. As can be seen, the stratigraphy of Area B is composed of alluvially deposited silts, silty sands, and clayey sands on top of sterile sands and gravels. The sterile sands and gravels located by Test Unit B-3 probably originated from an old stream bed buried by subsequent colluvial deposits and historic fill. The distribution of late nineteenth to early twentieth century historic artifacts throughout all non-sterile levels supports the observation of an historically high energy environment in Area B. In addition, significantly fewer artifacts were recovered from Levels I-IV (0-1.2 ft below surface) than from Levels V-VII (1.2-2.5 ft below surface) although all of the artifacts were otherwise identical and all dated to the late nineteenth to early twentieth century.

This distribution indicates that all of the non-sterile levels were deposited during relatively recent historic events and that Levels I-IV deposited since the mid-nineteenth century. The alternating bands of silts and sands in Test Unit B-3 in Levels II-VII also point to significant alluvial action within a relatively high energy environment with the silt layers representing relatively low energy deposits and the sand layers representing slightly higher energy flood deposits.

No further excavations were undertaken in Area B. The Sauber House site (N-11074) was not considered to be eligible for National Register status because of its lack of integrity and no

FIGURE 28

Profile of the East Wall of Phase I Test Unit B-3



further work is recommended. The limits of the Sauber House site are shown in Figure 24.

AREA C: WEST OF BEAVER VALLEY ROAD AND SOUTH OF BEAVER CREEK

Area C is a grassy field west of Beaver Valley Road and south of Beaver Creek. The area extends from Beaver Creek to the north to a hedgerow and ephemeral creek approximately 200 feet to the south (Figure 8, Plate 7). Area C consists of a single terrace south of Beaver Creek and contains no discernable slope although most of the area is the toe of a fairly steep slope to the west. The project ROW runs parallel to Beaver Valley Road and extends approximately 20 feet west of the road (Figure 8).

Visual inspection of the area found no standing structures in the area. The nearest standing structure is a stone farmhouse (N-569) located approximately 600 feet northwest of the project ROW (Plate 8). A recent garage built for this structure is located approximately 400 feet from Area C. The potential for historic archaeological resources was considered to be high as one structure, a blacksmith and wheelwright shop, was identified in the area by background research, and appears on Beers' 1868 atlas (Figure 12). The potential for archaeological resources associated with the yard areas of N-569 was considered to be low because of the distance from the structure. The potential for intact prehistoric resources was considered to be medium to low because of the historically documented alluvial action along Beaver Creek including the flood of 1843 that destroyed a number of mills in the area.

PLATE 7

Area C, Looking South, June 1986

PLATE 8

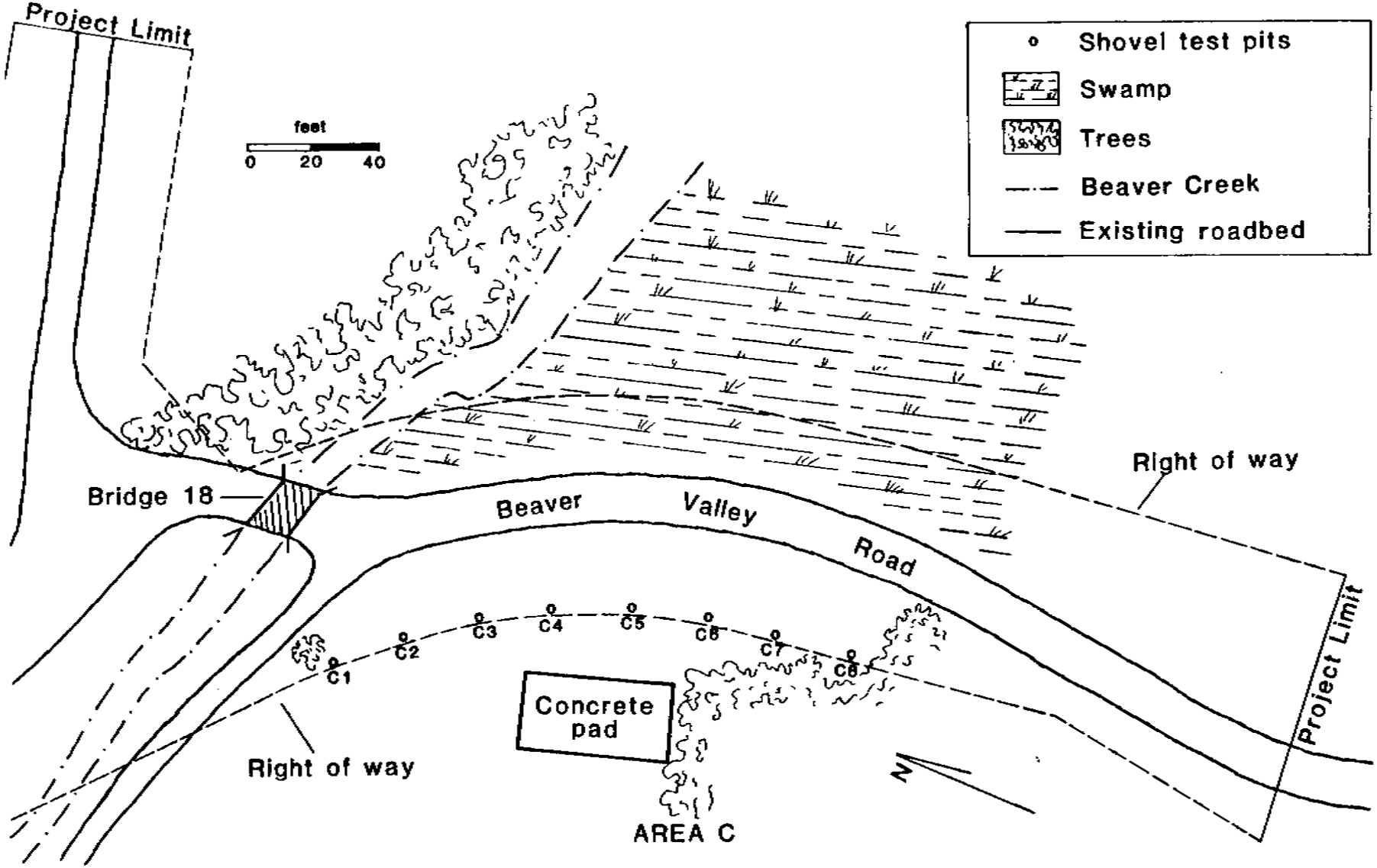
Area C, Looking West Towards Standing Structure N-569,

Background Research - One potential cultural resource was identified by background research. This resource is an early to mid-nineteenth century blacksmith and wheelwright shop located in the area on a number of historic maps (Table 2). No potential prehistoric resources were identified. The blacksmith and wheelwright shop identified in Area C first appears on Beer's 1868 atlas (Figure 12). The shop was then owned and operated by Jehu Chandler who is listed in census and tax assessment records as a blacksmith. At this time Jehu Chandler probably lived in structure N-569 as shown on Beers' atlas (Figure 12). The shop also appears on Lee (1875), Hopkins (1881), and Baist (1893). In 1889 Elizabeth Highfield purchased the property (NCD F-14-268). According to one informant, Mr. Albert Mayer, a blacksmith operated a the site until 1926. The blacksmith shop stood until 1939-1940 when the present owners, Woodlawn Trustees, destroyed the structure and built a garage on the site. The garage was later removed from the area and placed on a neighboring property, Heather Hill Farms. The concrete foundation of the garage, however, remains and is located in Figure 8.

Phase I Survey - A total of 8 shovel tests and three measured test units were excavated in Area C as part of the Phase I Survey. One historic archaeological site was located, the wheelwright and blacksmith shop identified by background research. The first nine shovel tests excavated in Area C were located along the project ROW and spaced 20 feet apart. These initial tests were labelled Shovel Tests C-1 to C-8 and are located in Figure 29.

FIGURE 29

Location of all Phase I Shovel Tests, Area C

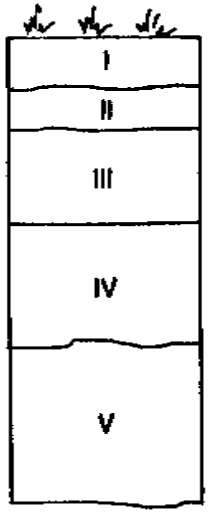


A typical stratigraphic sequence in Area C can be seen in the profile of Shovel Test C-2 (Figure 30). A thin (0.25 foot thick) humus was underlain by a layer of dark brown clayey silt from 0.25-0.50 feet below surface (Level II, Figure 30) and a gray-brown clayey silt from 0.5-1.0 feet below surface (Level III, Figure 30). Beneath this were two sterile levels of sandy clay that graded from a yellow-brown sandy clay at 1.0-1.65 feet below surface (Level IV, Figure 30) to a yellow-gray layer at 1.65-2.0 feet below surface (Level V, Figure 30). No plowzone was encountered in this test or in any of the other excavations in Area C.

Late nineteenth to early twentieth century artifacts were recovered from the humus and clayey silt levels (Levels I-III, Figure 30). The artifacts recovered from Test C-1 consisted of 1 heavily weathered whiteware sherd, 3 window glass fragments, 4 fragments of clear bottle and lamp glass, 27 heavily corroded nail fragments, 12 unidentified corroded metal objects, 7 pieces of coal slag, and 6 small pieces of coal. This assemblage was typical of that recovered from the other shovel tests excavated in Area C. No earlier diagnostic historic artifacts were recovered in any of the shovel tests. Sterile levels at approximately 1.0-1.5 feet below surface were located in all of the shovel tests. One prehistoric artifact, a medial section of a quartz stemmed projectile point was found in Shovel Test C-1. No other prehistoric artifacts, however, were recovered and no intact prehistoric land surfaces were located by the shovel tests. This projectile point is an isolated find and does not represent an intact prehistoric site.

FIGURE 30

Profile of Phase I Shovel Test C-2



Soil Key

I-Humus

II-Dark brown clayey silt with pockets of small gravels and sand

III-Gray-brown clayey silt with small pockets of sand and gravels and numerous small flecks of historic charcoal

IV-Yellow-brown sandy clay with abundant medium brown and orange sandy mottlings. Sterile.

V-Yellow gray sandy clay with some orange brown sand mottlings and numerous fragments of decomposing schist. Sterile

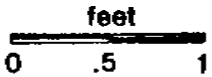
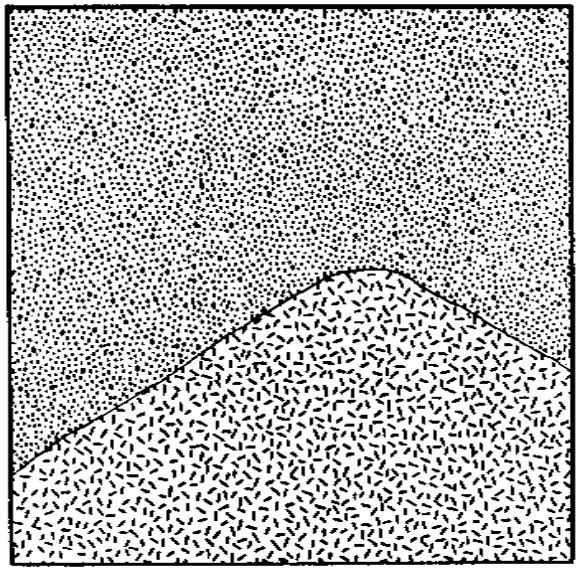
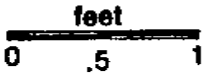


FIGURE 31

Floor Plan of Phase I Test Unit C-1





Micaceous Cap

Yellow brown silt with artifacts

Shovel Test C-4 was the first Phase I excavation to locate part of the wheelwright and blacksmith shop identified by background research. Immediately below the humus, the shovel test located a layer of very compact micaceous ash and mortar. The shovel test was enlarged into a 3 X 3 ft Test Unit C-1. Once the humus was removed, one edge of the micaceous mortar feature was located in the northern half of the unit. A floor plan of Test Unit C-1 at this level is shown in Figure 31. Surrounding the micaceous cap was a yellow-brown fine grained silt. The micaceous cap was very hard and compact and was composed of large amounts of mica, cinders, coal ash, and a few small pockets of sand and gravel. Numerous large, but randomly placed rocks were also found within the silt layer.

The micaceous cap was then removed and the material screened seperately from the surrounding yellow-brown silt. This cap was observed to be approximately 0.4 feet thick and contained relatively few artifacts. The silt layer, however, was found to contain numerous window glass (274) and corroded nail (24) fragments. Four redware, three whiteware, and one pearlware sherds were also recovered. Some of the rocks located in the yellow-brown silt showed evidence of mortar, but no intact segments of a foundation or other structural feature were located.

The unit was then expanded 2 feet to the north to determine whether the yellow-brown silt was a pocket within a larger micaceous feature and possibly to further expose the disturbed rock and mortar feature found under the micaceous cap. In this

extension, removal of the humus revealed the micaceous cap over the floor of the entire unit. The cap was not removed and the area around the test unit was augered to determine the extent of the micaceous feature. The location of these auger tests and their relationship to Test Unit C-1 (3 X 5 ft unit) and Shovel Test C-4 is shown in Figure 32.

The auger grid located the micaceous cap as far as 8 feet north of Test Unit C-1 and as far east as the large boulders placed along Beaver Valley Road by Woodlawn Trustees. Test units placed south and west of C-1, however, proved negative (Figure 32). Shovel Test C-5, 20 feet to the south of Test Unit C-1, also proved negative.

A datum was then established 55 feet south of the southwest corner of Test Unit C-1 and out of the project ROW. The coordinates of Test Unit C-1 therefore were N55W0. All further Phase I and Phase II work completed in Area C were measured from this datum and labelled accordingly. As in Area A, all units were labelled according to the coordinates of their southwest corner.

A second test unit (N55W3) was then excavated immediately west of Test Unit C-1 as an auger test two feet west of the first unit did not locate the micaceous cap. After removal of the humus, the western edge of the micaceous cap was located just inside the east wall. Test Unit N55W3 was then extended two feet to the north to define more of the western edge of the micaceous cap. Figure 33 shows the micaceous cap as uncovered in Test Units C-1 (N55W0) and N55W3.

FIGURE 32

Auger Tests in Area C showing the Extent of the Micaceous Cap

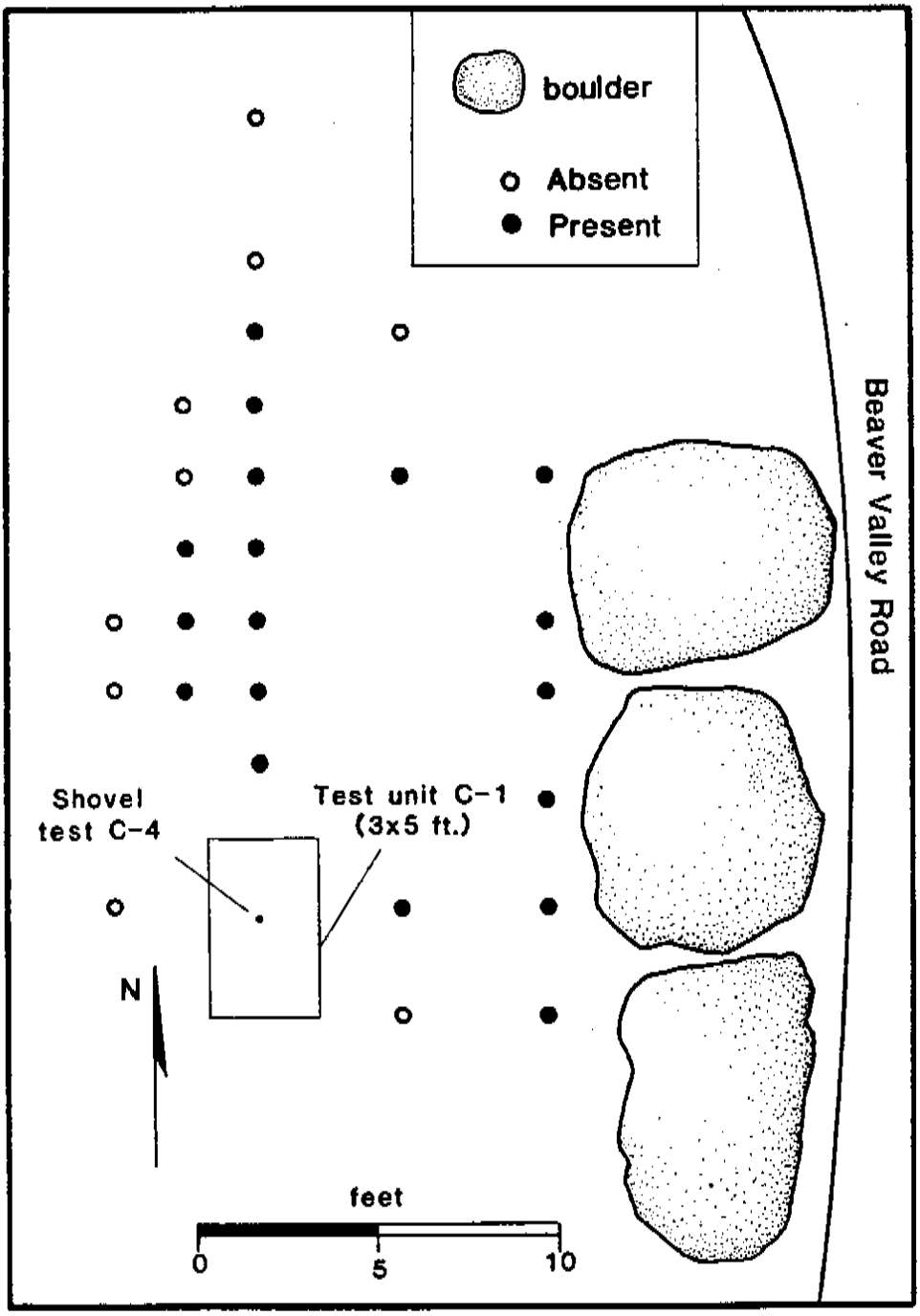
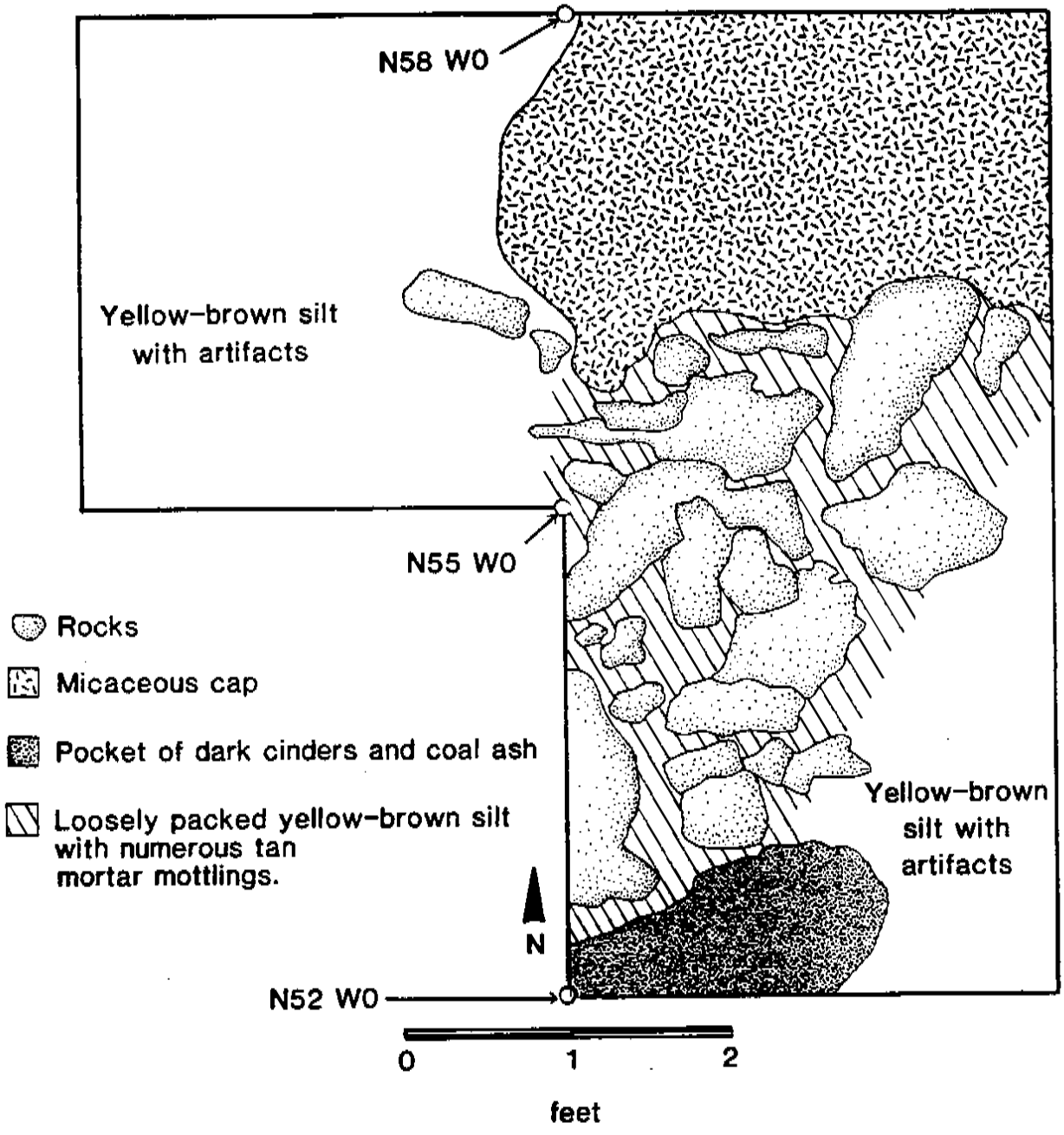


FIGURE 33

Floor Plan of Phase I Test Units C–1 N55 W0, N52 W0, N55 W3, Area C



A third test unit, N52W0, was then excavated south of Test Unit C-1 to determine the integrity and orientation of the disturbed rock and mortar feature uncovered south of the micaceous cap. As expected, the micaceous cap was not encountered in this unit. Beneath the humus was a yellow-brown silt similar to that uncovered in the southern third of Test Unit C-1. Beginning at approximately 0.3 feet below surface more of the stone and mortar feature was uncovered. An approximately north-south orientation was observed, but no intact portions of the feature were observed (Figure 33). Excavation of this unit completed the Phase I Survey of Area C.

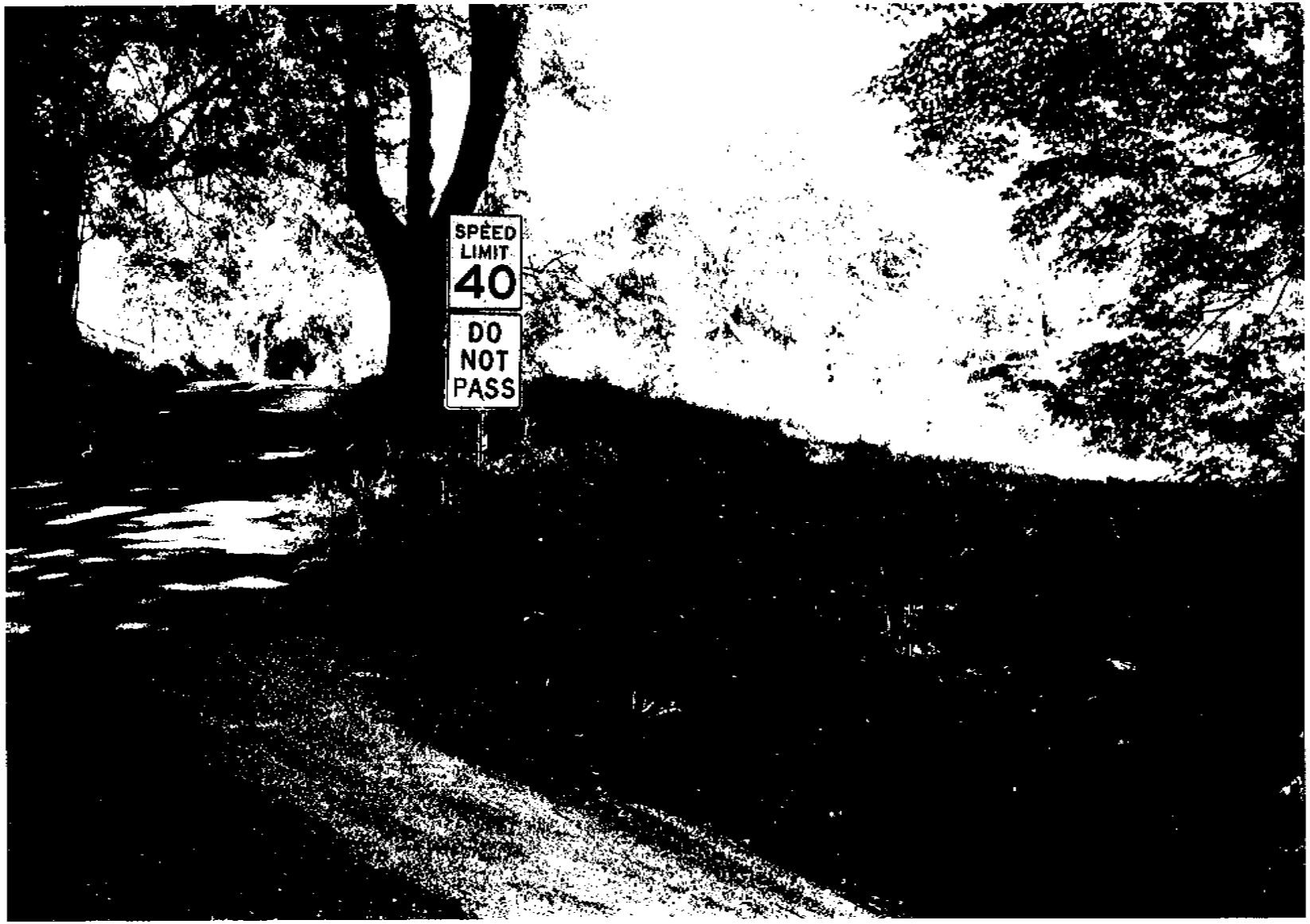
On the basis of this evidence, a Phase II Survey was recommended for Area C as the potential for intact features under the micaceous cap was considered high.

AREA D: SOUTH OF BEAVER VALLEY ROAD AND NORTH OF BEAVER CREEK

Area D is a moderately to heavily eroded slope along the southern edge of Beaver Valley Road north of Beaver Creek and near the Delaware-Pennsylvania state line (Figure 8, Plate 9). The slope is 3-8% according to the New Castle County Soil Survey (Matthews and Lavoie 1970:sheet 3). Visual inspection of the area located no standing structures or obvious archaeological features and found the slope to be much closer to 8%. The potential for historic cultural resources was considered to be low due to the degree of slope and because no structures had been located within the area by background research. The potential for prehistoric cultural resources was considered to be

PLATE 9

Area D, Looking Northwest, September 1986



medium if intact prehistoric landscapes survived and low if they did not.

Background Research - The only potential cultural resource identified by background research was a possible mill race identified on three historic maps, Lee (1875), Hopkins (1881), and possibly Baist (1893). This mill race supplied water from Beaver Creek east of Beaver Valley Road to the "old Woolen Mill" and Tempest's Paper Mill (Figure 6; Mill Sites A and B) approximately 1500' to the west. This mill race however, does not appear on later maps including a 1914 topographic prepared for Woodlawn Trustees, the current owners or a 1934 property atlas made by the Franklin Survey Company. Similarly, no mention of a mill race or associated structures is made in any of the deed transactions for the property.

Phase I Survey - A complete field reconnaissance of both sides of Beaver Valley Road in Area D located no intact portions of the mill race. Some indication of the mill race, however, was seen outside of the project area towards Beaver Creek to the south and towards another bend in the creek to the west. It is likely that whatever survived of the mill race when both of these maps were made was subsequently destroyed by the paving and widening of Beaver Valley Road in the early twentieth century and erosion.

Six shovel tests were excavated in Area D to test for intact prehistoric and historic remains and to locate intact buried landscapes. Four of the shovel tests were placed along the project ROW south of Beaver Valley Road and two were placed out of the ROW at the bottom of the slope near the north side of Beaver Creek. The location of these shovel tests are shown in

Figure 34. No historic or prehistoric sites were located and no intact buried landscapes were identified.

A typical stratigraphic profile from Area D can be seen in the profile of Shovel Test D-3 (Figure 35). The stratigraphy of Area D consisted of a thin humus then dark brown silty clay loams (Levels I-II, Figure 35) on top of sterile dark yellow-orange clay loams and light brown clay loams with abundant iron oxide concretions and heavily worn pebbles (Levels III-V, Figure 35). No plowzone was encountered in any of the tests. At approximately 2.2 feet below surface, a 0.4-0.5 foot thick sterile lens of decomposed schists was encounterd in all of the shovel tests excavated. This level and the clay loams below represent the in situ weathering of local geologic strata, precluding the existence of buried cultural materials. No intact buried historic or prehistoric landscapes were located. No prehistoric or historic features were identified.

A few generally no more than a half dozen per shovel test, historic artifacts were recovered from the humus and dark brown silty clay loam levels (Levels I and II, Figure 35) of each shovel test. All of the artifacts recovered were small (less than one inch in diameter), heavily weathered, and date to no earlier than the mid-to-late nineteenth century. Wire nail and undecorated whiteware fragments were recovered down to approximately 3.2 feet below surface, showing the degree of erosion and colluvial deposit in the area. The historic artifacts recovered in Area D probably originated from farther up the slope north of Beaver Valley Road which is part of the yard

FIGURE 34

Location of all Phase I Shovel Tests in Area D

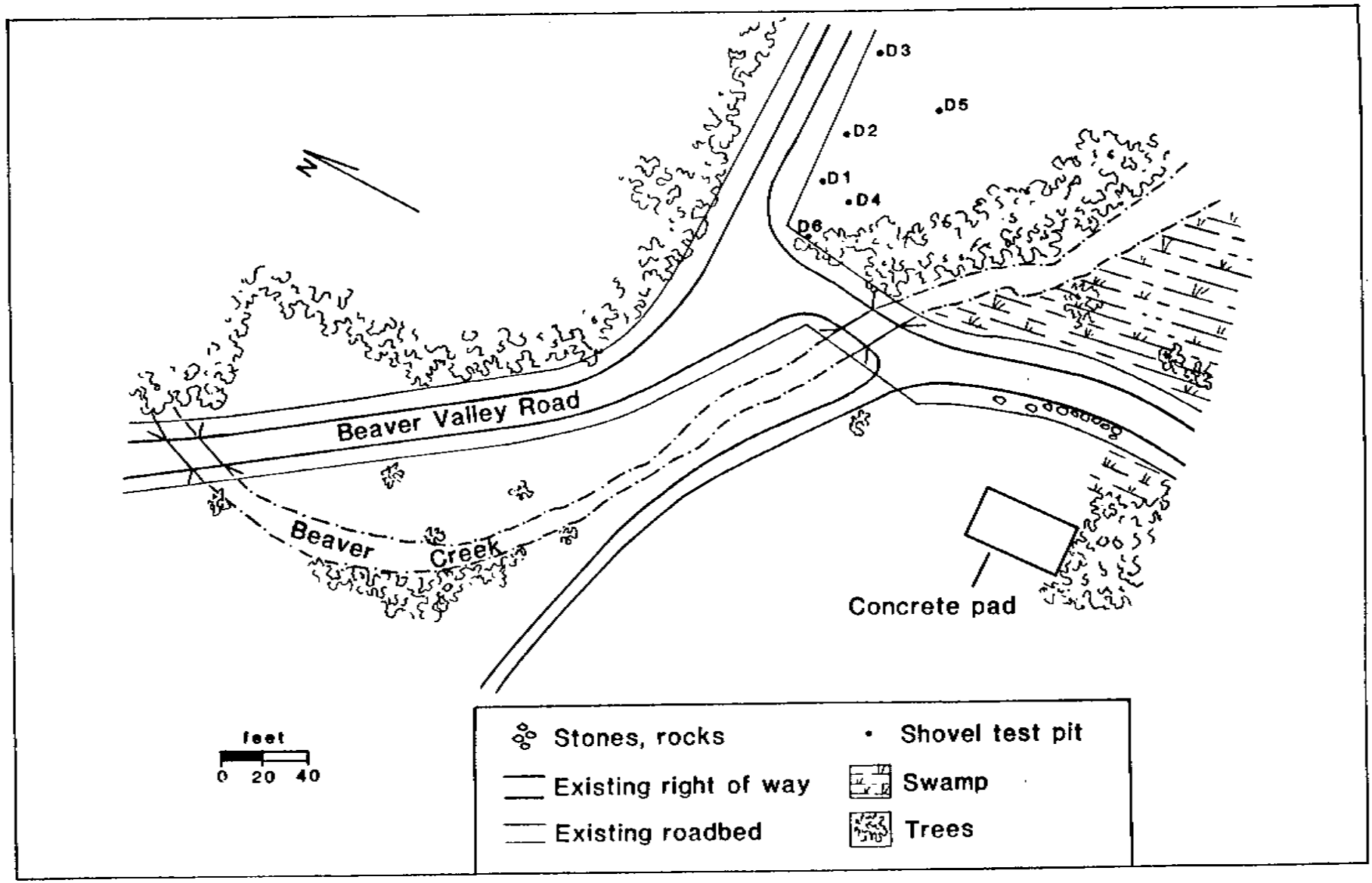
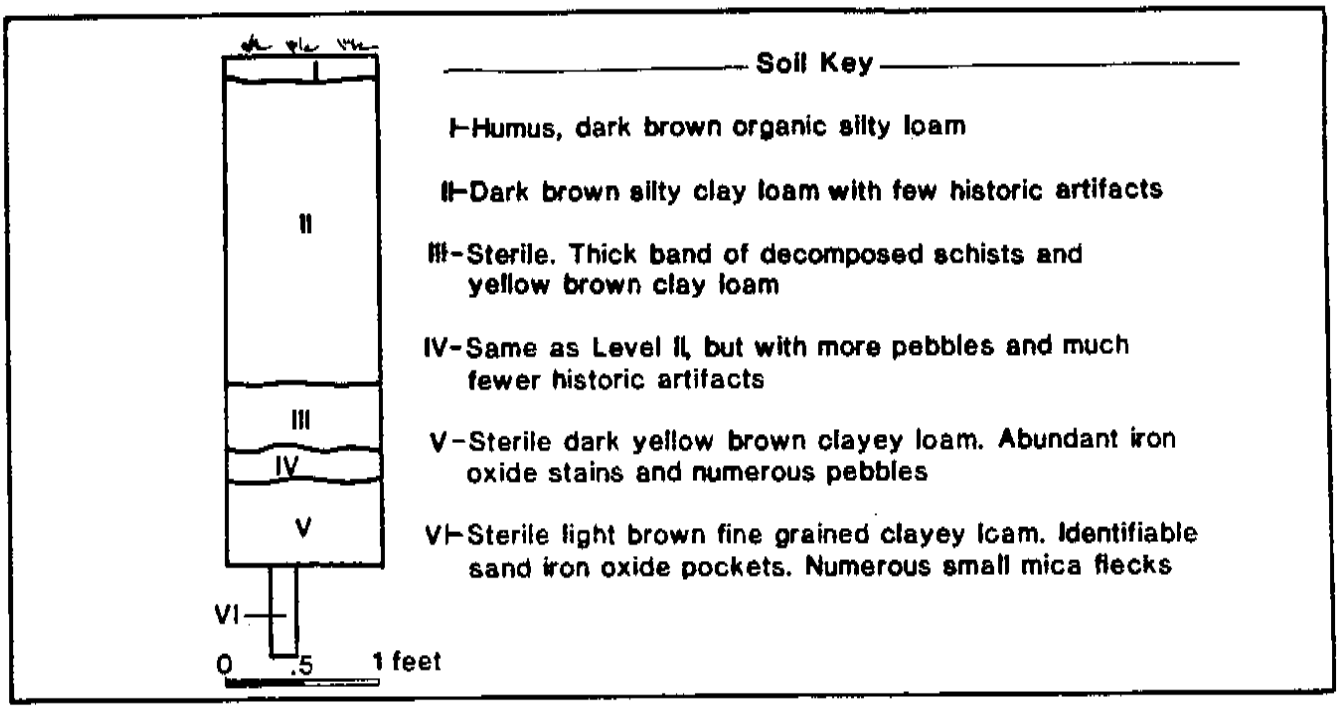


FIGURE 35

Profile of Phase I Shovel Test D-3



area of a late eighteenth century stone farm house located in Pennsylvania and approximately 350 yards north of the project area. Other historic artifacts recovered included clear and amber bottle glass and clear window glass fragments, non-diagnostic redware sherds, and small pieces of coal. No prehistoric artifacts were recovered.

In conclusion, Area D was found to contain no prehistoric or historic cultural resources. Evidence of moderate to severe erosion and colluvial action were seen in the modern topography, the stratigraphy of the area identified in the shovel tests, and in the wide vertical distribution of contemporary mid-to-late nineteenth century artifacts. The heavily weathered surfaces of the ceramic and glass artifacts recovered also argues for

significant erosion and colluvial action. No further work is recommended for this segment of the project area.

PHASE II SITE INVESTIGATIONS

This section of the report describes the Phase II research undertaken in the project area. Phase II site investigations were conducted to determine the National Register eligibility of the sites located by the Phase I Survey. The criteria for this evaluation are those of the Department of the Interior for reviewing nomination to the National Register of Historic Places (36 CFR 60). Determination of National Register eligibility were completed through Phase II excavations and background research as part of the compliance process under section 106 of the National Historic Preservation Act. Phase II testing consisted of the systematic excavation of 3 X 3 ft test units and measured test trenches to determine the contextual integrity and limits of sites. Additional grids of shovel tests were also excavated to sample yard areas and identify artifact distribution patterns. All excavations were located and labelled according to datum stakes established during the Phase I Survey. Phase II research also included intensive archival research, particularly of deed and census records. Phase II Survey was not conducted on sites that were found to be heavily disturbed and therefore not potentially National Register eligible by Phase I testing. A summary of the sites located during the Phase I testing is given in Table 3. The compliance status of each site is also noted.

Only one of the three sites identified by the Phase I survey was not subject to Phase II research. This site was the Sauber

TABLE 3

STATUS OF ALL SITES LOCATED BY PROJECT

CRS #	Site # and Name	Status
N569.1	7NC-B-18 J. Chandler/Highfield Blacksmith Shop	Phase I/II testing completed
N-10955	7NC-B-19 A. Chandler/Galbreth Store and Post Office	Phase I/II testing completed
N-11074	7NC-B-20 Sauber House Site	Phase I testing completed

House Site (N-11074; 7NC-B-20) located by background research and Phase I test excavations in Area B. This site was determined by Phase I excavations to be heavily disturbed. No intact structural remains were located and evidence of contextual mixing and colluvial action were found. The Sauber House site was therefore determined not to be eligible for National Register nomination.

A. CHANDLER/GALBRETH SITE (N-10955, 7NC-B-19) (Area A) (Figure 23)

The A. Chandler/Galbreth site is located along the east side of Beaver Valley Road south of Beaver Creek and is roughly bisected by the proposed ROW. The site has two primary components, the remains of a mid-to-late nineteenth century store and post office built by Amor Chandler (component 1) and an early twentieth century house built by T.A.R. Galbreth (component 2).

The limits of the A. Chandler/Galbreth site (N-10955; 7NC-B-19) as indicated by the Phase I and II Survey are shown in Figure 23. The proposed ROW is also shown in this figure. The site

extends from approximately 280 feet south of Beaver Creek along the east side of Beaver Valley Road to approximately 360 feet south of the creek and the end of terrace 2. These limits are based on the distribution of structurally-related artifacts within the original series of tests excavated by the Phase I survey and the extensive tests and background research completed by the Phase II survey. These limits also correspond to those suggested by background research, in particular deed research that shows the southern limit of the A. Chandler/Galbreth property to be approximately 400 feet south of Beaver Creek. Summaries of all the deed transactions for the A. Chandler/Galbreth site are given in Tables 4-6.

TABLE 4

SUMMARY OF DEED TRANSACTIONS FOR THE
A. CHANDLER/GALBRETH PROPERTY, 1699-1814

Transaction	Date	Deed Reference
Wm. Pennto the Pennsylvania Land Company	11 August 1699	De. Co. Pa. Deed B-2-329; NCD T-1-216
Pa. Land Co. to William Hicklen	13-14 March 1722	NCD G-1-387
William Hicklen to his son William	9 March 1735	NCD X-1-210
William Hicklen (Jr.) to his son Joshua Hicklen	25 August 1801	NCC Will, 25 August 1801
Joshua Hicklen to his brother John Hicklen	1814	NCD O-3-490
John Hicklen to Amor Chandler	[4 June 1814]	NCD Q-8-40

TABLE 5

SUMMARY OF DEED TRANSACTIONS FOR THE A. CHANDLER/GALBRETH PROPERTY, 1814-1888

Transaction	Date	Deed Reference
John Hicklen to Amor Chandler	[4 June 1814]	NCD Q-8-40
Amor Chandler to his children Jehu, Amor, Rachel, Mary, Elizabeth, and Abigail	19 Oct. 1813	Intestate Laws of De.; NCD T-3-9, NCD V-3-230
Amor Chandler (Jr.) to his sisters Rachel, Mary, Hannah, Elizabeth, and Abigail	13 April 1814	NCD T-3-9
Rachel, Mary, Hannah, Elizabeth, and Abigail Chandler to brother Amor Chandler (Jr.)	13 April 1814	NCD V-3-230
Jehu, Mary, and Hannah Chandler to brother Amor Chandler (Jr.)		NCD A-5-149
Rachel Chandler to siblings Jehu, Mary, and Hannah to Amor Chandler (Jr.)	9 July 1838	Intestate Laws of De.; NCD G-5-283
Jehu, Mary, and Hannah Chandler to brother Amor Chandler (Jr.)	1 Dec. 1838	NCD G-5-283
Amor Chandler (Jr.) to his son Hayes Chandler	27 June 1863	Intestate Laws of Delaware; NCD Y-9-221
Hayes Chandler to William E. and wife Margaret Butler	1 April 1873	NCD Y-9-221
William and Margaret Butler to Amor H. and wife Mary Chandler	10 Feb. 1877	NCD W-10-242
Amor H. and Mary Chandler to William S. Stokes	30 August 1888	NCD G-14-383

TABLE 6

SUMMARY OF DEED TRANSACTIONS FOR THE A. CHANDLER/GALBRETH SITE, 1888-PRESENT

Amor H. and Mary Chandler to William S. Stokes	30 August 1888	NCD G-14-383
William S. Stokes to George W. Goodley and wife Amanda W.	1 May 1889	NCD R-14-151
George W. and Amanda W. Goodley to William S. Hilles	11 June 1896	NCD E-17-529
William S. Hilles to George H. and wife Lucy E. Foster	12 Feb. 1897	NCD H-17-506
George H. and Lucy E. Foster to Thomas A. R. Galbreth	5 June 1900	NCD G-18-337
Thomas A. R. Galbreth to son Willard T. and wife Ella W. Galbreth, and daughters Harriet Hinkson and Eva Moore	21 Feb. 1939	Intestate laws of De.; NCD N-41-103
Willard T. and Ella W. Galbreth, Harriet Hinkson and husband W. Thomas Hinkson to Woodlawn Trustees	23 August 1939	NCD N-41-103

The A. Chandler/Galbreth property was originally part of Rockland Manor, a huge 4,120 acre tract created by William Penn in 1682. Two thousand acres of the Rockland tract, including all of the Beaver Valley area, was sold to the Pennsylvania Land Company in 1699 (Delaware County, Pa. Deed B-2-329, NCD T-1-216). A summary of all deed transactions for the property from 1699-1814 is given in Table 4. In 1722, William Hicklen purchased 180 acres from the survivors of the original Pennsylvania Land

Company for 54 pounds (NCD G-1-337,338). Hicklen then owned approximately 262 acres including all of the study area. Hicklen then sold the entire parcel to his son William for an unspecified amount in 1735 (NCD X-1-210). Both of the Hicklens were prosperous farmers as evidenced by tax assessment records and the inventory of the estate of William Hicklen (Jr.) at his death in 1801. In 1781 and 1783 William Hicklen (Hickl[and], Hickl[a]n) was assessed 26 pounds in taxes, a substantial amount compared to other farmers in the area. In November 1801 William Hicklen (Jr.) possessed an estate valued at 850 pounds sterling.

At his death, William Hicklen split his land equally between his eldest son John and the next eldest, Joshua. (NCC Will, 25 August 1801). The house (N-567) was left to his son John. Joshua received the part of his father's land "on the North Easterly Side of the Road (Beaver Valley Road)." This parcel included the site of the A. Chandler/Galbreth property.

Joshua Hicklen then sold his part of his fathers land, approximately 34 acres to his older brother John (NCD O-3-490). William Hicklen's other son, Samuel, left for Ohio in 1809 (1809 Tax Assessment). In 1807 Joshua Hicklen possessed $81 in stock while his brother John possessed stock valued at $116 (1807 Tax Assessment).

Between 1812 and 1814, John Hicklen sold a parcel of land containing approximately 26 acres to Amor Chandler. This parcel contained the Chandler-Galbreth site (NCD Q-8-40). The transaction for this parcel was recorded in 1814, but it is likely that Amor Chandler received the land earlier as an 1813 Tax Assessment for Brandywine Hundred assessed for 26 acres

transferred from John Hicklen worth $104. Chandler was also assessed for live horses and colts worth $4.80, young cattle worth $5.30 and other livestock for a total assessment of $110 including 300 pounds of live pigs worth $6 (1813 Tax Assessment).

Amor Chandler died on October 19, 1813 and left equal portions of his estate to his six children: Jehu (the oldest), Amor (Jr.), Rachel, Mary, Elizabeth, Hannah, and Abigail. A summary of the geneology of the Chandler family in Beaver Valley at this time is given in Appendix III. The house, N-1357, was split between Amor Jr. and the five sisters. This structure is approximately 1500 feet outside of the project ROW (Figure 7). The sisters, of which Rachel was the oldest, received the northeasterly part of the house, water rights, and a 100 X 60 ft part of the garden along Beaver Valley Road. In a series of transactions in April 1814 the children traded shares between themselves, with Jehu and Amor (Jr.) purchasing most of their father's land (NCD T-3-9, V-3-230). These transactions are summarized in Table 5. Rachel and the sisters were still provided for by their father's will and lived with their brother Amor in N-1357.

By 1816, Amor Chandler (Jr.) owned 85 acres in Beaver Valley, of which 60 acres was improved land and 25 acres were "small woods land," all worth $1250 according to a tax assessment for that year. Part of this assessment was also for one stone dwelling and frame barn. This is the first reference to any structures owned by Chandler and probably refers to N-1357 and not the store (component 1 of the A. Chandler/Galbreth site). At

this time, Chandler was also assessed for livestock worth $254.50 (1816 Tax Assessment). According to store owners' lists prepared for New Castle County, Amor Chandler opened the first store in Beaver Valley sometime between 1823 and 1827. This store is component 1 of the Chandler/Galbreth site. In 1826 Chandler reported $800 of foreign goods and manufactures in his store. Chandler, however, also still farmed and was assessed for $63 for cattle and other stock in 1825 (1825 Tax Assessment).

By the mid 1830s there is evidence that Amor Chandler operated the store through others. Scharf (1888:907) states that Charles and Martin Palmer were engaged in trade at the store. This is also suggested by a list of store owners for 1831 that lists "Amor Chandler and Co." as store operators in Brandywine Hundred. At this time, Chandler reported that his store carried $800 of foreign merchandise. A similar list compiled in June 1832 implies that Amor Chandler and at least one other person were operating the store. In this year Amor Chandler reported $600 of foreign merchandise. By 1833 it is certain that Chandler operated the store with Charles Palmer as noted in the store list for that year. Martin Palmer, however, does not appear on the store lists for Brandywine Hundred until 1835, at which time Chandler's name is crossed out on the store lists and Martin Palmers' is written over it.

In 1834 Amor Chandler was assessed for livestock worth $262, a substantial amount compared to his neighbors, John and Jehu Chandler who were assessed for $40 and $72 worth of livestock respectively (1834 Tax Assessment). In 1836 he was assessed for 80 acres of land, one-half of a stone house, a barn, and a store

house, all valued at $2000 (1837 Tax Assessment). This store house is the first direct reference to a structure on the A. Chandler/Galbreth property. A list of store owners in Brandywine Hundred indicates that Wesley Talley was then operating the store. The "one-half of a stone house" was part of the settlement of A. Chandler's (Sr.) estate at his death in 1813. At this time, Amor (Jr.) shared the house (N-1357) with his wife Sarah whom he married in 1816 and his four surviving sisters Rachel, Hannah, Mary, and Elizabeth. None of these sisters ever married (Chandler Family Reunion Committee 1937).

In 1837 Rachel Chandler is assessed for the other half of the stone house (N-1357), 6 1/2 acres of land, and $12 worth of livestock. Her brother, Amor, owned livestock valued at $282. When Rachel Chandler died intestate on July 9, 1838, her portion of the estate went to her brothers and sisters, Jehu, Amor, Mary and Hannah. No Orphans Court records exist but an inventory of her belongings at the time of her death was taken and appears in Appendix II. Her personal estate was appraised at $553.15 and included furniture, tableware, and assorted livestock and farm produce.

In December 1838, Jehu, Mary, and Hannah Chandler sold their shares of Rachel's property to Amor (NCD G-5-283). This property was comprised of three small parcels and totaled approximately 4 acres. Jehu, Mary, and Hannah had already sold all of their shares of their father's original estate to Amor (NCD A-5-149). The parcels transferred at Rachel's death thus completed Amor Chandler's acquisiton of his father's land.

Amor Chandler owned the A. Chandler/Galbreth site until his death in June 1873 at which time the land passed to his son, Hayes Chandler. Amor Chandler remained a prosperous farmer throughout his life. He continued to farm and to run the store through a number of operators, usually relatives. Amor Chandler's nephew John Chandler and John's son, Amor H. Chandler, operated the store for a number of years according to census records and state directories. Amor H. Chandler eventually succeeded his father at the store even after William Butler purchased the store and property in April 1873 (NCD Y-9-221, Table 5). Amor Chandler is listed in the 1850 Agricultural Census as owning 70 acres of improved and 20 acres of unimproved land. The cash value of this farm was $6,000. Chandler also owned farm implements and machinery worth $100 and stock worth $400, including 3 horses, 9 milk cows, 2 other cattle, and 6 pigs. Total farm production for that year consisted of 100 bushels of wheat, 300 bushels of Indian corn, 200 bushels of oats, and 50 bushels of Irish potatoes. Chandler's orchard crops were valued at $50. Other products of the farm included 800 pounds of butter, 20 tons of hay, 6 bushels of clover seeds, and 1 pound of hops. According to this census, Chandler also butchered $80 worth of animals that year.

Dairy and meat products seem to have been an important part of the local economy of Beaver Valley beginning in the mid-nineteenth century. This is consistent with a larger trend in agriculture in New Castle County, particularly Christiana and Brandywine Hundreds, where a growing Wilmington and Philadelphia market made dairy, meat and other perishable products profitable.

Delaware State Directories consistently list at least one and sometimes two butchers in Beaver Valley. Amor H. Chandler, Amor Chandler's great nephew, is listed as a butcher from 1859 until 1888. In this year Amor H. Chandler is listed as a butcher along with Byron Carpenter. A summary of the geneology of the Chandler family in Beaver Valley at this time is given in Appendix III.

In the 1860 census of Brandywine Hundred, Amor Chandler is listed as retired and owning approximately $5000 in personal and real estate. At the age of 73, Amor was living with seven other people, including his son Hayes (age 38), Hayes' wife Rachel (age 24), and their young children Howard and Eli. Also in the house (N-1356) were a domestic, Eliza Sirex, an eighteen year old laborer, Levi Garrett, and a thirteen year old boy, Gibbons Pharow.

At this time, Amor Chandler's nephew John Chandler is listed by the census as a grocer owning $3000 in real estate and $2600 in personal estate. He was living with his wife Rebecca Ann, their daughter Rachel Ann, and three young men, two of which were blacksmiths and the other a carpenter. The house, "Dwelling No. 9" is probably N-569, across the road from his Uncle Amor's store and post office. John Chandler inherited this house from his father Jehu, a blacksmith.

According to this census, Amor H. Chandler is probably living in the store, component 1 of the A. Chandler/Galbreth Site, then owned by his great uncle Amor. This structure, "Dwelling No. 7" in the census, also housed Amor H.'s wife Rebecca M. Chandler and their children Theodore, Eliza, and

Sarah. Amor H. is listed as a butcher and as possessing $600 in personal estate.

Amor Chandler's store became an official post office on August 5, 1865. John Chandler was the first postmaster (Bounds 1938:90). At this time John and his son Amor H. operated the store and post office at the A. Chandler/Galbreth site. These two men ran the store with help from at least one other butcher, Byron Carpenter, until William Butler purchased the store and parcel in 1873.

In 1861, Amor Chandler's 92 acres of land and buildings, including the stone and frame store were assessed at $4600. Hayes Chandler received the store and property parcel from his father Amor at his death in 1863. Amor died intestate, but as with all of the other intestate Chandler deaths, no Orphan's Court proceedings were initiated. Hayes sold the store and parcel to William E. Butler and his wife Margaret in April, 1873 (NCD Y-9-221). The store was obviously quite prosperous at this time, as Butler paid $2500 for it and only 2 1/2 acres of land. Amor H. Chandler continued to be a butcher at the store according to state directories. Butler replaced John Chandler as proprietor. Amor H. and his wife Mary purchased the store and lot from Butler in 1877 for $3000. In 1882, Amor H. is listed in the state directories as postmaster and general store merchant. By 1888 he evidently took on another butcher, Byron Carpenter. Amor H. Chandler and his wife then sold the store and lot to William Stokes in 1888 for $6,000 (NCD G-14-383, Table 5). At this time it is unlikely that Amor H. lived above the store; in the deed Amor H. is listed as living in Wilmington. It is likely that he

moved out of the store when Butler bought the property.

The post office ceased operations on February 28, 1901. Elizabeth Highfield, wife of J. G. Highfield who owned the blacksmith shop across the road, was postmaster at the time. The store also probably ceased operation at this time or shortly thereafter. From William Stokes, the store and post office structure passed to George Goodley and his wife Amanda in 1889 (NCD R-14-151, Table 6). The Goodleys paid only $2350 for the store and lot. Goodley sold the property shortly thereafter to William S. Hilles and his wife Lucy in 1896 for $2,000.

Between 1896 and 1939 when the current owners, Woodlawn Trustees, purchased the property, five different parties owned the A. Chandler/Galbreth parcel. A summary of deed transactions for the property from 1888 to the present is given in Table 6. Hilles owned the store and parcel only a short time and sold in 1897 to George Foster and his wife Lucy for only $1,000 (NCD H-17-506). Between 1894 and 1897, H. C. Stausebach and Elizabeth Highfield are listed in the state directories as postmasters. No grocers are listed for Beaver Valley in this period although John and Jacob Twaddell, both butchers, are listed as living in the area. Thomas A. R. Galbreth purchased the A. Chandler/Galbreth lot in June, 1900 for $900. In a 1908 state directory, Thomas Galbreth, Williard's son, is listed as a "general store grocer" in Beaver Valley. This is the last documentary reference to a functioning store on the property or in the Beaver Valley area. That the store had ceased to function as such by this time is supported by deed research that shows subsequent deed

transactions mentioning a "dwelling house" rather than a store on the property, as they had previously. A 1914 topographic map prepared for Woodlawn Trustees also shows the structure as a house rather than a store (Figure 10).

One informant, Mr. Albert Mayer, lived in the area and remembers visiting the Galbreths on a number of occasions. They lived in a supposed "Sears and Roebuck" mail order home they built behind the stone store/dwelling when the structure became too dilapidated for use and too expensive for renovation. This "Sears and Roebuck" frame house was located by the Phase I Survey and corresponds to component 2 of the A. Chandler/Galbreth site (Potential Resource 1, Figure 9). The stone store/dwelling structure was allowed to deteriorate and was destroyed between 1916 and 1940 by the Galbreths.

The Galbreths built their "Sears and Roebuck" house behind the store sometime after 1916, when a topographic map shows only the store and a small related barn. In 1940 the current owners, Woodlawn Trustees, destroyed the Galbreth house. It is not known whether the Galbreth house was indeed a mail order home from the Sears and Roebuck Company. Later excavations exposed almost all of the foundation of the structure, but the foundation does not match the floor plans of any known Sears and Roebuck mail order house (Stevenson and Jandl 1986). It is possible, however, that Galbreth assembled the materials he purchased from the Sears and Roebuck Company in some other way than suggested by the catalog.

Phase II Excavations - Phase II Survey of the A. Chandler/Galbreth site consisted of the excavation of 80 measured test units and approximately 150 feet of measured test trenches.

Two archaeological components were identified and tested. These two components correspond to the store and post office first operated by Amor Chandler (Component 1) and the early twentieth century frame house built behind the store and post office by Thomas Galbreth (Component 2) as identified by background research and Phase I survey. The test units sampled specific areas within each of the two components, provided information on wall construction and placement, and established vertical control for detailed soil profiles. Measured test trenches were used to expose selected portions of the remaining foundations to identify interior walls, additions, and details of construction.

The limits of the A. Chandler/Galbreth Site are shown in Figure 23. The northern limit of the site was established by the swamp, the original transect of shovel tests during the Phase I Survey, and by a grid of nine additional shovel tests excavated during the Phase II Survey. The location of all these shovel tests is shown in Figure 18. The western limit of the site is Beaver Valley Road. The eastern limit of the site was established through test units and measured test trenches excavated during the Phase II Survey and the local topography. The southern limit of the site was established by shovel test grids excavated during the Phase I Survey, and test units, test trenches, and documentary research completed during the Phase II Survey.

Component 1- (A. Chandler Store and Post Office) - The first excavations completed during the Phase II survey were seven 3 X 3 ft test units located east of Phase I Test Unit A-1 in

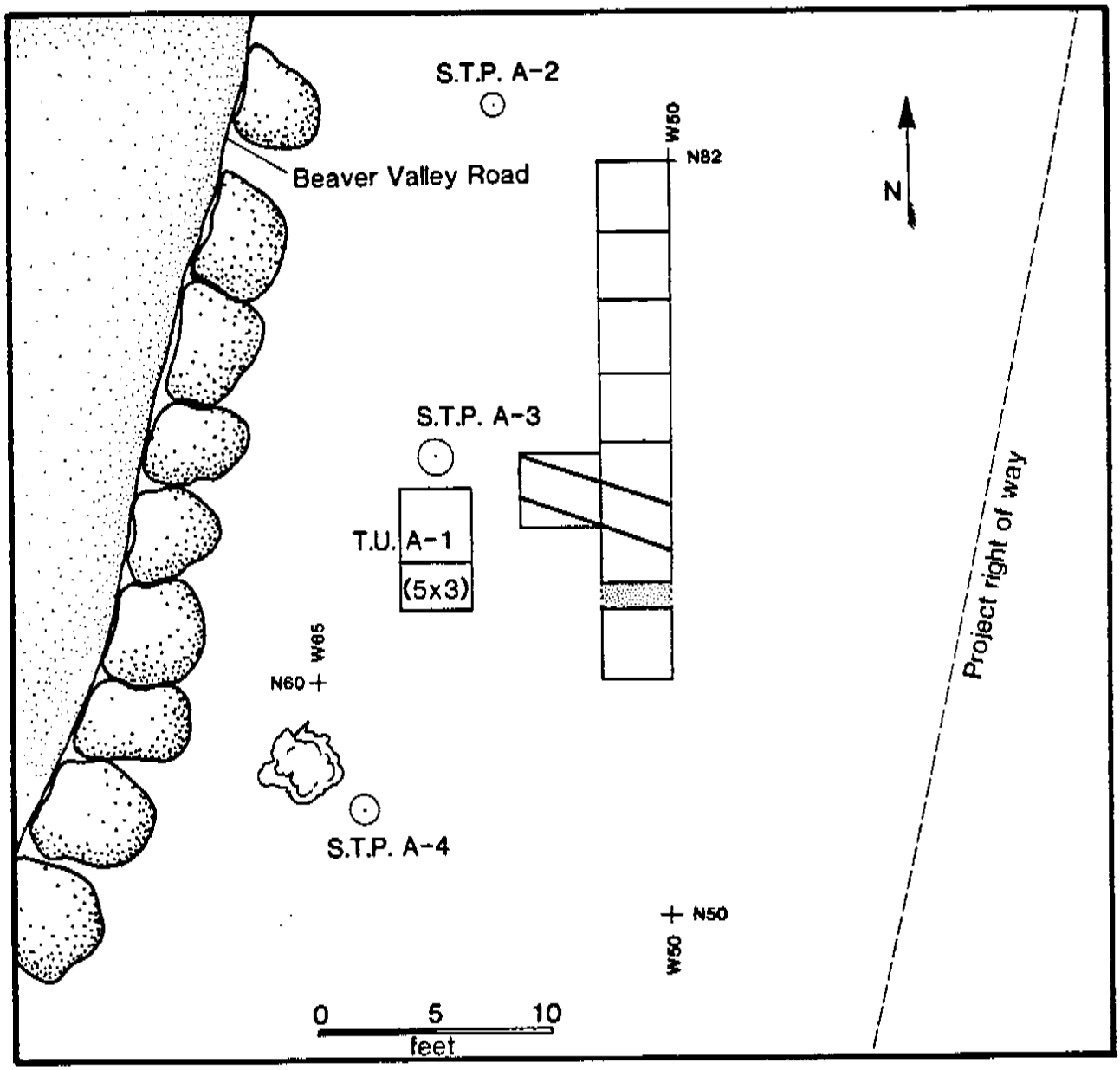
terrace 1. The location of these seven units, N60W53 - N79W53, and Test Unit A-1 are shown in Figure 36. The purpose of these units was to expose more of Feature A-1, the foundation-related rock and mortar rubble located at approximately 1.1 feet below surface in Phase I Shovel Test A-3 and Phase I Test Unit A-1.

Feature A-1, the disturbed fieldstone and mortar foundation rubble, was located in Test Units N64W53 and N67W53 (Figure 36). Immediately east of the rubble, however, intact portions of the foundation were located. This foundation was found to have a distinct east-west orientation and was labelled Feature A-8. Historic artifacts and one feature, a fence postmold, were identified in Test Units N70W53 to N79W53.

The intact portion of the stone and mortar foundation was uncovered in test unit N64W53 at approximately 0.9 feet below surface. This was overlain by a layer of loosely-packed medium brown sandy loam from 0.3 to 0.9 feet below surface. Numerous 0.2-0.4 feet long rocks were also found in this level and probably relate to destroyed upper portions of the wall. This in turn was overlain by a well developed humus extending to approximatley 0.3-0.35 feet below surface. A profile of Test Unit N64W53 is shown in Figure 37. Along the southern edge of the feature, the medium brown sandy loam was found to be much deeper, extending to approximately 1.14 feet below surface. Along this edge at this depth a thin, approximately 3/8 inch thick, crude concrete floor was encountered and labelled Feature A-7. Immediately north of the concrete floor a portion of an intact stone and mortar foundation was located and labelled Feature A-8. The floor extended to the wall along its entire

FIGURE 36

Location of Test Unit A-1 (Phase I), Test Units N66.5 W56, and N60 W53-N79 W53 (Phase II), A.Chandler/Galbreth Site (N-10955, 7NC-B-19)



Feature A-1, mortared fieldstone wall

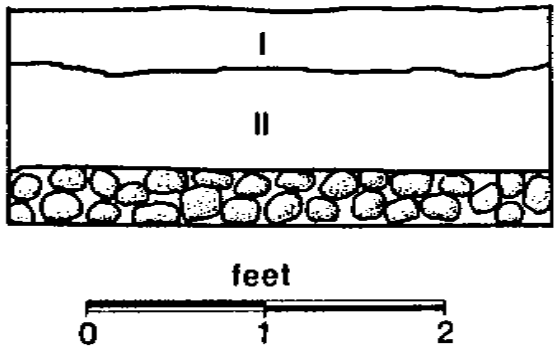
Tree

Boulder

Unexcavated

FIGURE 37

Profile of Phase II Test Unit N64 W53, A.Chandler/Galbreth Site



Soil Key

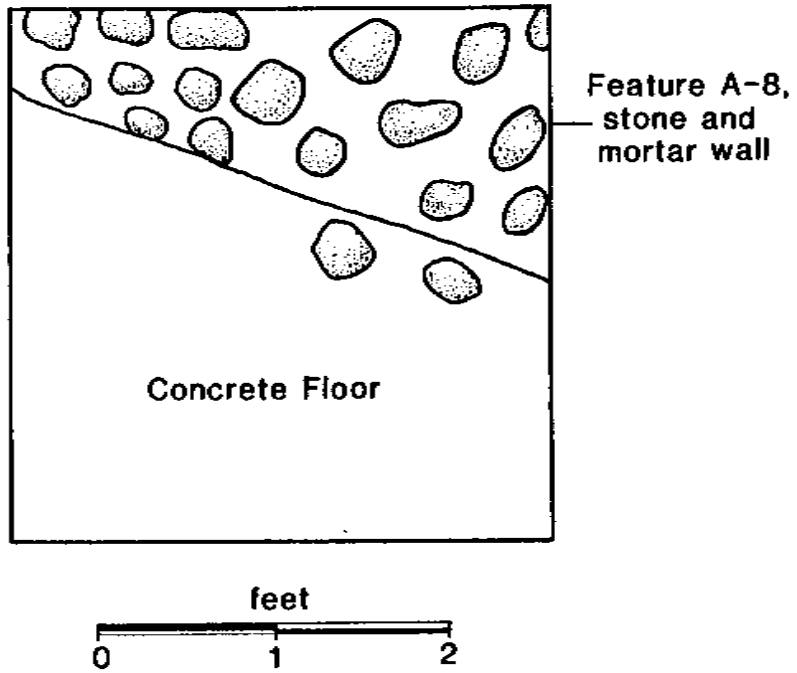
I Humus

II Medium brown sandy loam with numerous pockets of tan-grey decomposed mortar and .2' –.4' diameter rocks

Feature A-8, stone and mortar foundation

FIGURE 38

Floor Plan of Test Unit N64 W53, A. Chandler/Galbreth Site



length except for two places in the northeast corner of the unit where it was penetrated by two large rocks displaced from upper portions of the wall. A floor plan of Test Unit N64W53 at 1.14 feet below surface showing the concrete floor (Feature A-7) and the foundation (Feature A-8) is given in Figure 38.

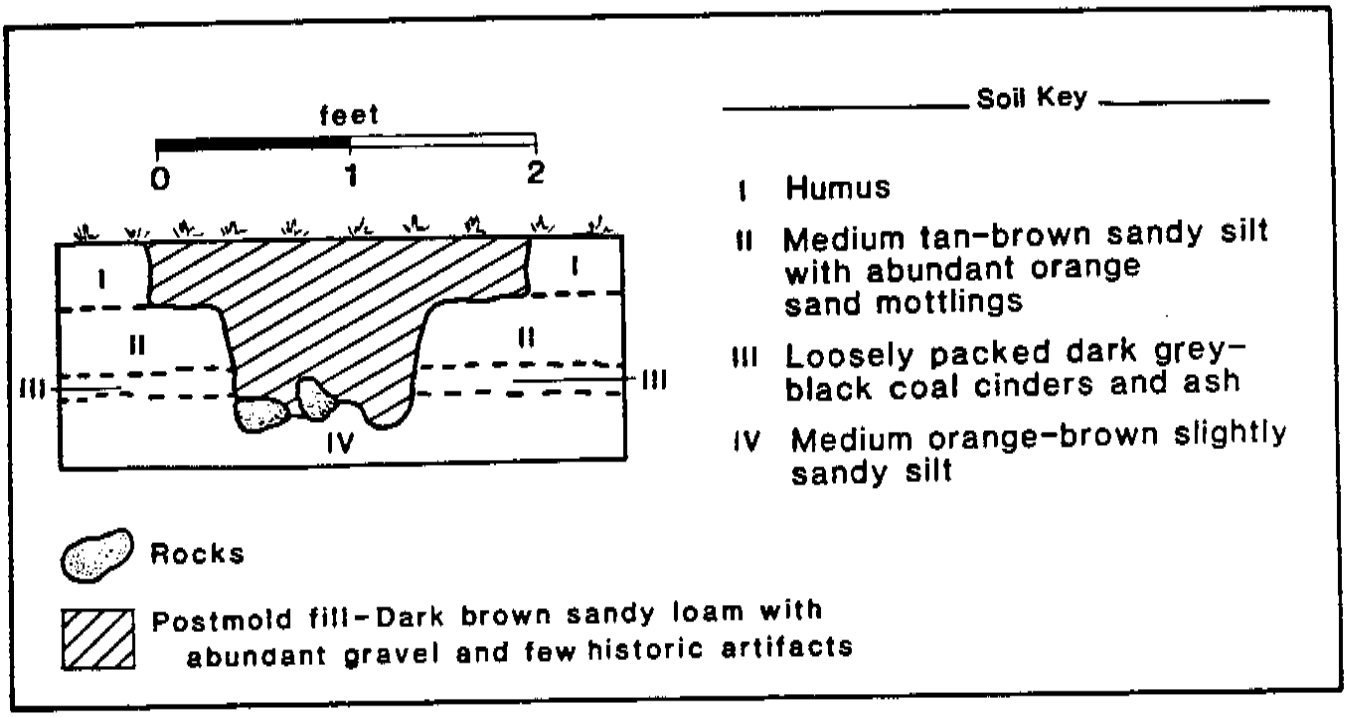
Test Unit N67W53 located more of Feature A-8, the mortared fieldstone foundation. The wall was observed to be approximately 1.5 feet wide and was composed of two to three courses of stone and a relatively soft tan-gray mortar. The mortar found in this unit was similar to material seen in Feature A-1.

A number of historic artifacts were found in association with Feature A-8 in Units N64W53 and N67W53. Two small pearlware sherds, one large whiteware sherd, and 16 small redware fragments, however, were the only ceramics recovered. The whiteware fragment was a large rim sherd decorated with a partially molded oak leaf pattern with a blue hand-painted rim. Other artifacts recovered a mid-to-late nineteenth century pharmaceutical bottle neck, a poorly preserved hat pin, numerous lamp glass fragments, and a small piece of slate. The pharmaceutical bottle neck is from a small bottle with an inside mouth diameter of approximately 1/2 inch and with a straight applied lip. A number of structurally-related artifacts were also recovered, specifically 49 window glass fragments amd 22 wire nail and nail fragments. This last group of artifacts are no doubt related to the frame portions of the structure.

One other feature was located in this series of test units. In N76W53, approximately 15 1/2 feet north of the foundation, a postmold approximately 0.5 feet in diameter was uncovered just

FIGURE 39

Profile of Postmold Located in N76 W53, A.Chandler/Galbreth Site



below the humus at 0.25 feet below surface. The location of this postmold is shown in Figure 36. The postmold was observed to contain three large rocks and was sectioned and then completely excavated. The feature was also observed to penetrate a thin layer of cinders and coal ash at approximately 1.15 feet below surface. This thin level and the shape of the postmold after excavation can be seen in Figure 39.

Very few historic artifacts were found in the postmold. Three pieces of window glass, one clear bottle glass fragment and one heavily oxidized nail was all that was found. No ceramic or other diagnostic artifacts were recovered. Two small rocks were found at the bottom of the post mold, but did not appear to be

otherwise related to the feature. Given the location of the postmold and its relationship to the foundation, it is likely that this postmold is part of a fenceline. Later excavations, however, did not locate any other postmolds or evidence of a fence line in the area, thus making any determination of function highly conjectural.

To sample the northern yard area of the A. Chandler/Galbreth site, a grid of 10 additional shovel tests were then excavated in the northernmost part of Area A east of Test Units N60W53-N79W53. The northernmost transect of shovel tests, along the N90 line, were located along the edge of the swamp noted in the Phase I Survey. These additional shovel tests were excavated later in the summer under much drier conditions and could therefore be placed further north into the swamp than Phase I Shovel Test A-1, which could not be excavated earlier in the year due to standing water. The location of these 10 additional shovel tests and Phase I Shovel Tests A-1 and A-2 is shown in Figure 40.

The types and relative densities of the artifacts recovered from these Phase II shovel tests were consistent with that recovered in Shovel Tests A-1 and A-2 and with the seven 3 X 3 ft test units excavated thus far. The total number of historic artifacts recovered from each of these shovel tests is given in Figure 40. The total number of structurally-related artifacts in this Phase II shovel test grid is given in Figure 41. The total number of artifacts recovered from these tests (Figure 40) is artificially high due to large numbers of recent historic artifacts, particularly beer bottle and automobile reflector fragments. One concentration of earlier artifacts, however, was

FIGURE 40

Location and Total Number of Historic Artifacts by Phase I and Phase II Shovel Test, A Chandler/Galbreth Site

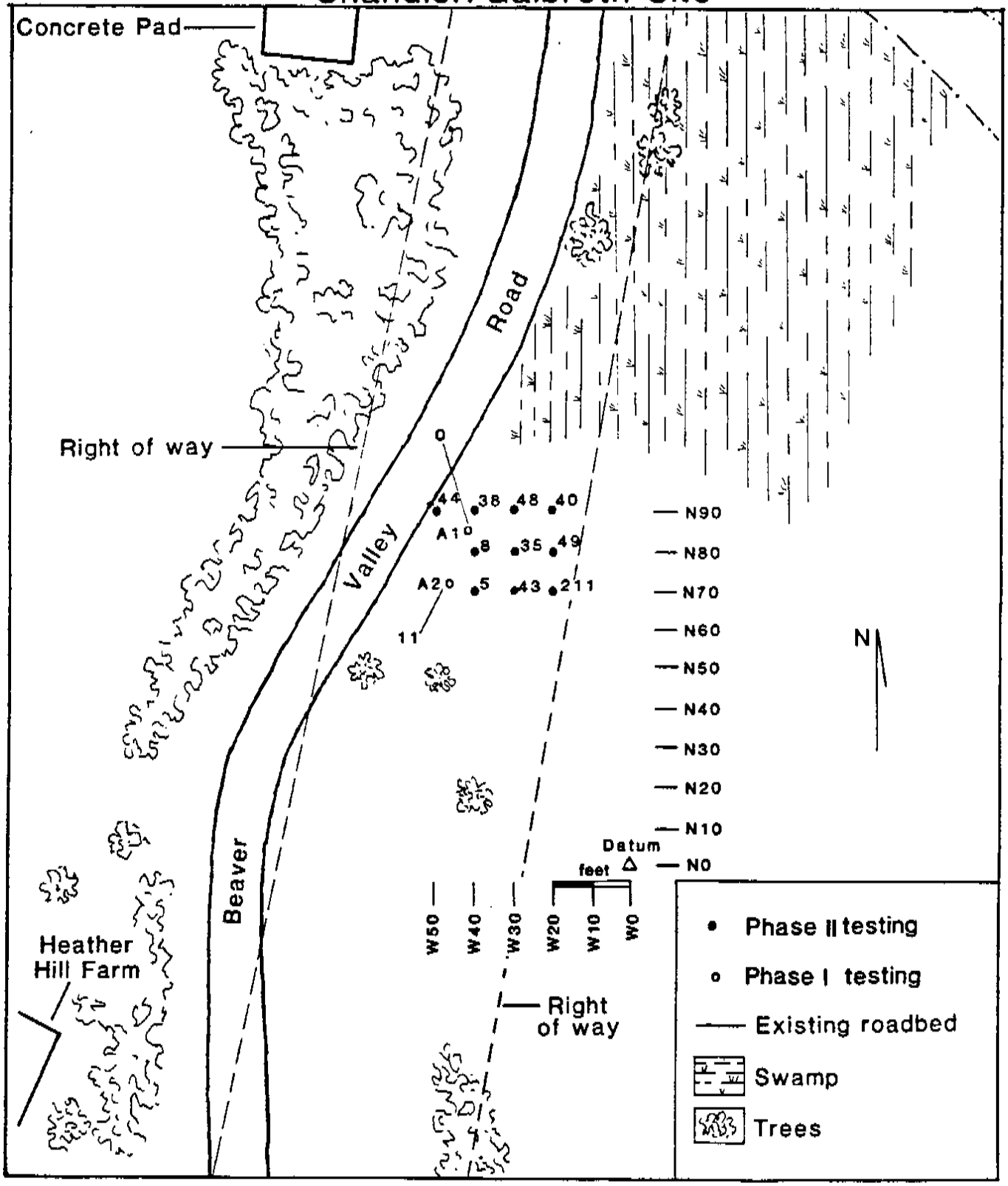
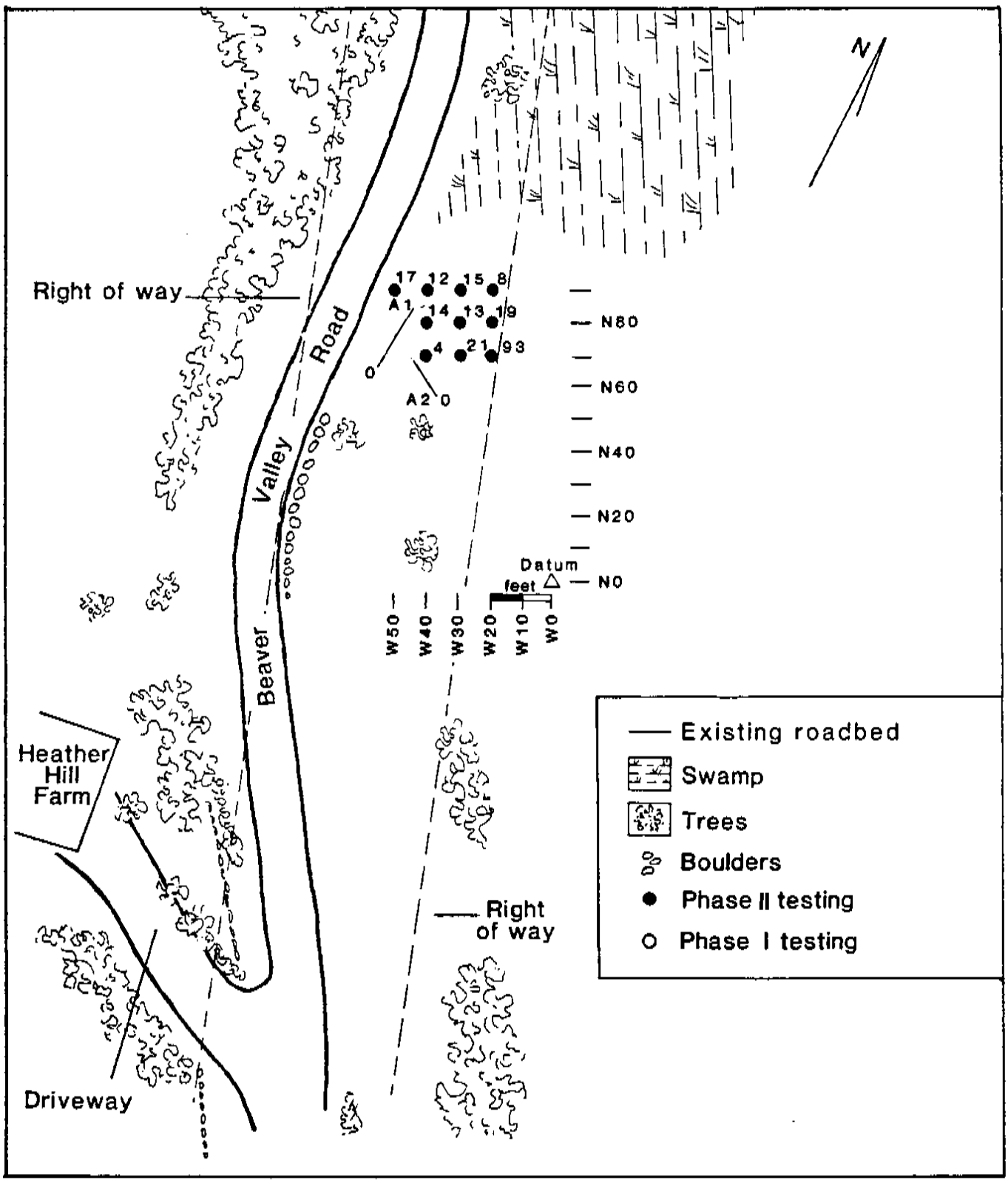


FIGURE 41

Total Structurally-Related Historic Artifacts by Phase II Shovel Test, A. Chandler/Galbreth Site



located. Shovel Test N70W20 contained 211 historic artifacts, roughly four times the highest number found in any of the shovel tests in terrace 1. Approximately one-half of the artifacts, however, were small, heavily oxidized nail fragments either associated with the stone and mortar foundation structure to the south, or perhaps more likely, with the small "barn" associated with the main structure that appears in the area on a 1914 topographic map (Figure 10). No other evidence of a structure, including features, was found in this shovel test.

Likewise, no other evidence was found of the "barn" by any of the other shovel tests or test units excavated in the area. One possible feature, a thin, oval pocket of gray-black silty sand, coal cinders, and gravel at 0.85 feet below surface, was located by Shovel Test N70W40. With the possibility of this feature being associated with the barn, the shovel test was enlarged to a 3 X 3 ft test unit. This unit, N70W42, located the level of gray-black cinders and gravel from 0.85-1.10 feet below surface. This layer was determined not to be a feature, but a unique fill horizon. The soil was screened and only two artifacts were recovered, a small piece of window glass and a small, heavily oxidized wire nail fragment.

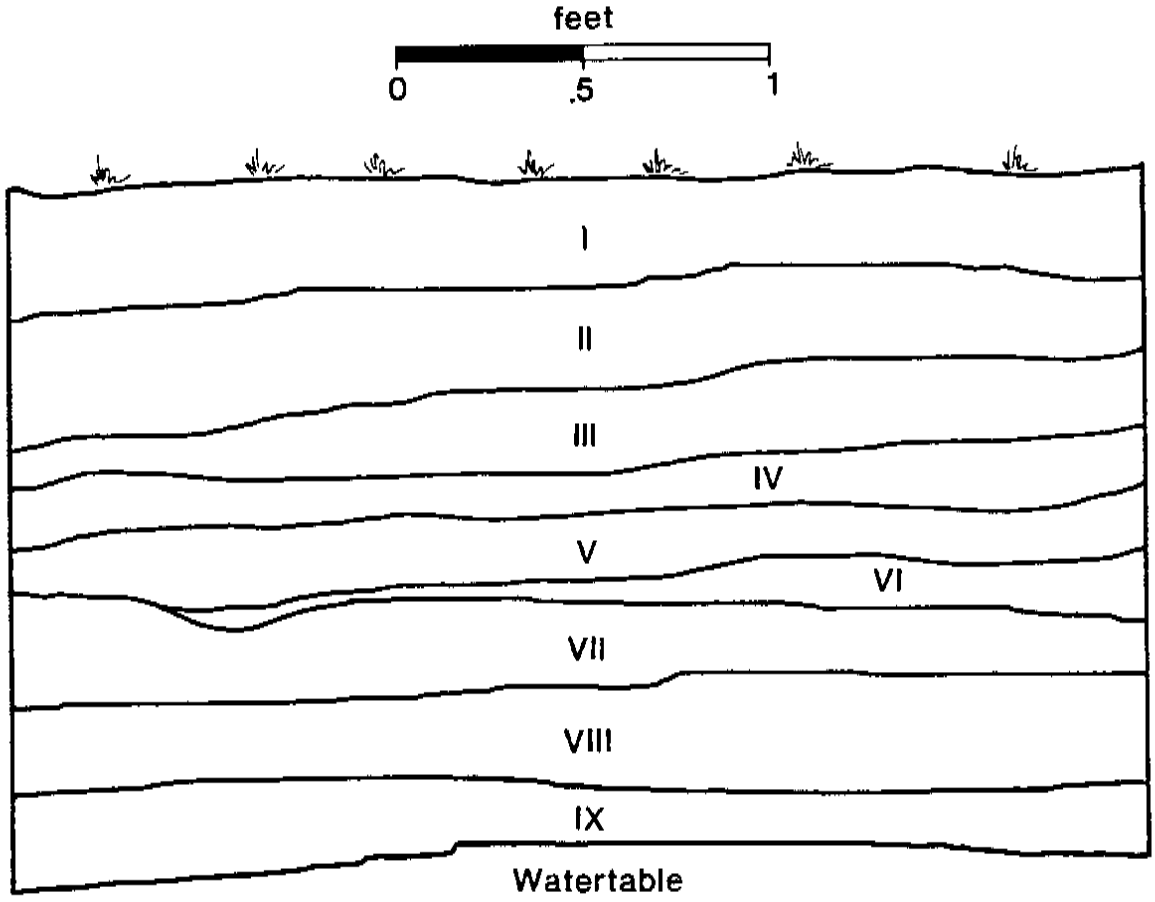
As no other evidence of the barn was located by any further Phase II work, it is likely that the high number of structurally-related artifacts found in Shovel Test N0W20 relate to the much larger and more substantial main structure. To further establish the stratigraphy of the area, Test Unit N70W42 was excavated through nine natural levels to a depth of 2.0 feet at which depth the water table was encountered.

The profile of the east wall of Test Unit N70W42 (Figure 42) shows a fairly complex stratigraphy. Beneath the humus was a layer of medium brown clayey sand with numerous rock fragments from 0.3-0.6 feet below surface (Level II, Figure 42). Underlying this was a level of tan medium to coarse-grained sandy loam from 0.6-0.85 feet below surface (Level III, Figure 42). Below this was the gray-black coal cinder and gravel already discussed (Level IV, Figure 42). Underlying this was a layer of gray clay with pockets of coarse sand from 0.85-1.1 feet below surface (Level V, Figure 42). This layer was very hard and compacted and is definitely fill. Below this was a thin layer of medium brown coarse grained sandy silt with orange sand mottlings in the southern half of the unit from 1.15-1.20 feet below surface (Level VI, Figure 42). Underlying this in the entire unit was a gray-brown highly organic coarse-grained sandy silt from 1.15-1.45 feet below surface (Level VII, Figure 42). Because of the organic content of this layer, it was probably deposited as fill and does not represent a buried landscape. Underlying this organic layer was a level of medium brown coarse-grained sand with numerous mottlings of sandy silt from 1.45-1.70 feet below surface (Level VIII, Figure 42). The deepest strata encountered before the water table was composed of medium brown sandy silt with numerous coarse-grained sand mottlings from 1.70-2.0 feet below surface (Level IX, Figure 42).

Historic artifacts were recovered from all levels in this test unit. Relatively few artifacts, however, were recovered from each natural level. Level IV (Figure 42), the gray-black

FIGURE 42

Profile of the East Wall of Test Unit N70 W42 , A. Chandler/Galbreth Site



Soil Key

I Humus

II Medium brown clayey sand with numerous rocks

III Tan sandy loam (medium to coarse grained) with some medium sized rocks

IV Cinders, oily asphalt linerubble

V Grey clay with coarse sand, gravely, very hard and compacted fill

VI Medium brown-orange mottled coarse-grained sandy silt, probably fill

VII Greyish-brown organic coarse-grained sandy silt

VIII Slightly silty coarse-grained sand

IX Medium brown sandy silt with coarse-grained sand

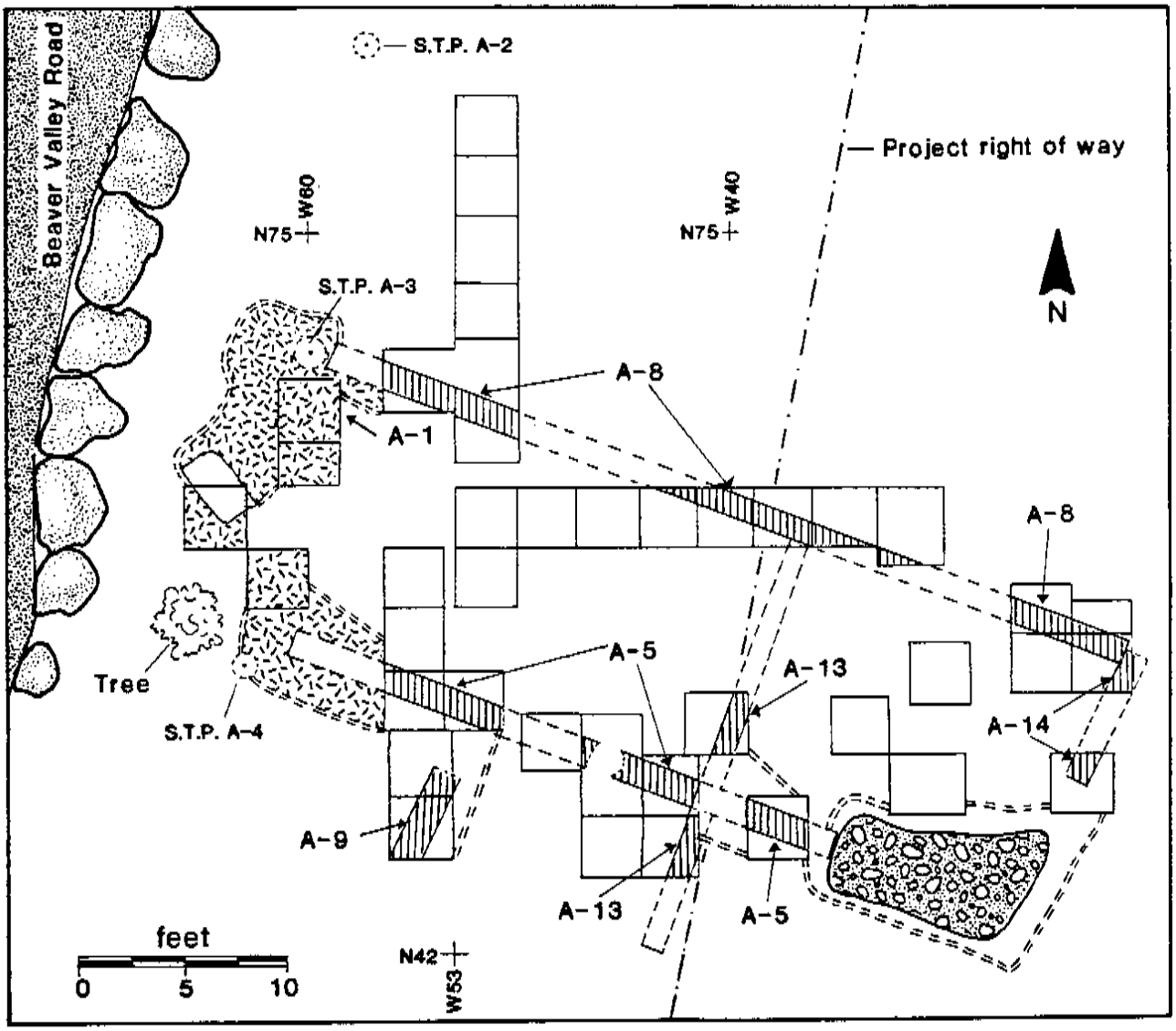
cinder and gravel horizon, and the 5 levels below contained only two or three artifacts each. No ceramics except heavily weathered and non-diagnostic redware sherds were recorded, Oxidized nail fragments and window glass, as usual comprised the majority of artifacts recovered. No other more diagnostic artifacts were recovered from any of the levels. Because of the lack of intact historic landscapes and the failure to locate any features, no further attempts were made to locate the auxiliary structure identified by background research.

While this first transect of test units was being excavated, it was decided to extend a line of tests east in hopes of locating more of the foundation (Feature A-8) and possibly interior walls and/or a corner. A line of seven 3 X 3 ft units along the north 60 line were then excavated (N60W50-N60W32, Figure 43). The foundation was uncovered in Units N60W44 to N59W32. Evidence of one interior wall was located in Test Unit N60W38, and labelled Feature A-13.

Feature A-8, the stone and mortar foundation was located at approximately 1.2 feet below surface in Test Unit N64W53 (Figure 38). The foundation continued to be approximately 1.5 feet wide and of fieldstone and mortar construction. Above the foundation was a thin humus extending to 0.2 feet below surface and a layer of orange brown sandy loam fill from 0.25 to 1.0 foot below surface that graded to an orange sandy loam along either side of the feature. Immediately above the intact portions of the foundation was a thin layer of tan-gray decomposed mortar stains and broken rocks. The stratigraphy found in this series of units is similar to that seen in Units N60W53 to N76W53 (Figure 43).

FIGURE 43

A. Chandler/Galbreth Site Map



Feature, excavated stone and mortar foundation wall

Stone slab

=== Limits of excavation

Boulder

Stone and mortar rubble

Disturbed micaceous cap

- - - Conjectured foundation wall

The interior wall found in Test Unit N60W38 (Feature A-13), was observed to run north to south and abutted Feature A-8 at a right angle at the southern edge of the feature (Figure 43). This confirmed that the interior of the structure was to the south of the wall and not to the north as suggested by Units N60W53 to N79W53 (Figure 36).

Artifacts recovered from units N60W50 to N59W32 along the foundation wall were similar in type and number to those located by the first line of test units. Relatively non-diagnostic whiteware and redware fragments, window glass, and nail fragements predominated. No intact pharmaceutical bottles or more diagnostic ceramics were recovered.

With the north foundation of the structure fairly well established, it was decided to attempt to locate the southern east-west foundation. This decision was made while the first group of test units were being excavated. To accomplish this, a line of test units was excavated south and slightly west of Test Units N57W53-N79W53. Beginning at the north 60 line, five test units were excavated to the south. The location of these units, N57W56.55-N45W56, is shown in Figure 43.

The east-west southern exterior foundation was located in Test Units N54W56.55 and N57W56.55 and was labelled Feature A-5. Another foundation, this one with a north-south orientation was also located by Test Units N48W56 and N45W56. This north-south foundation was labelled Feature A-9. Both foundation segments as located by these units are shown in Figure 43.

In Test Unit N51W56.55, Feature A-5 was overlain by approximately 1.75 feet of medium brown sandy loam fill,

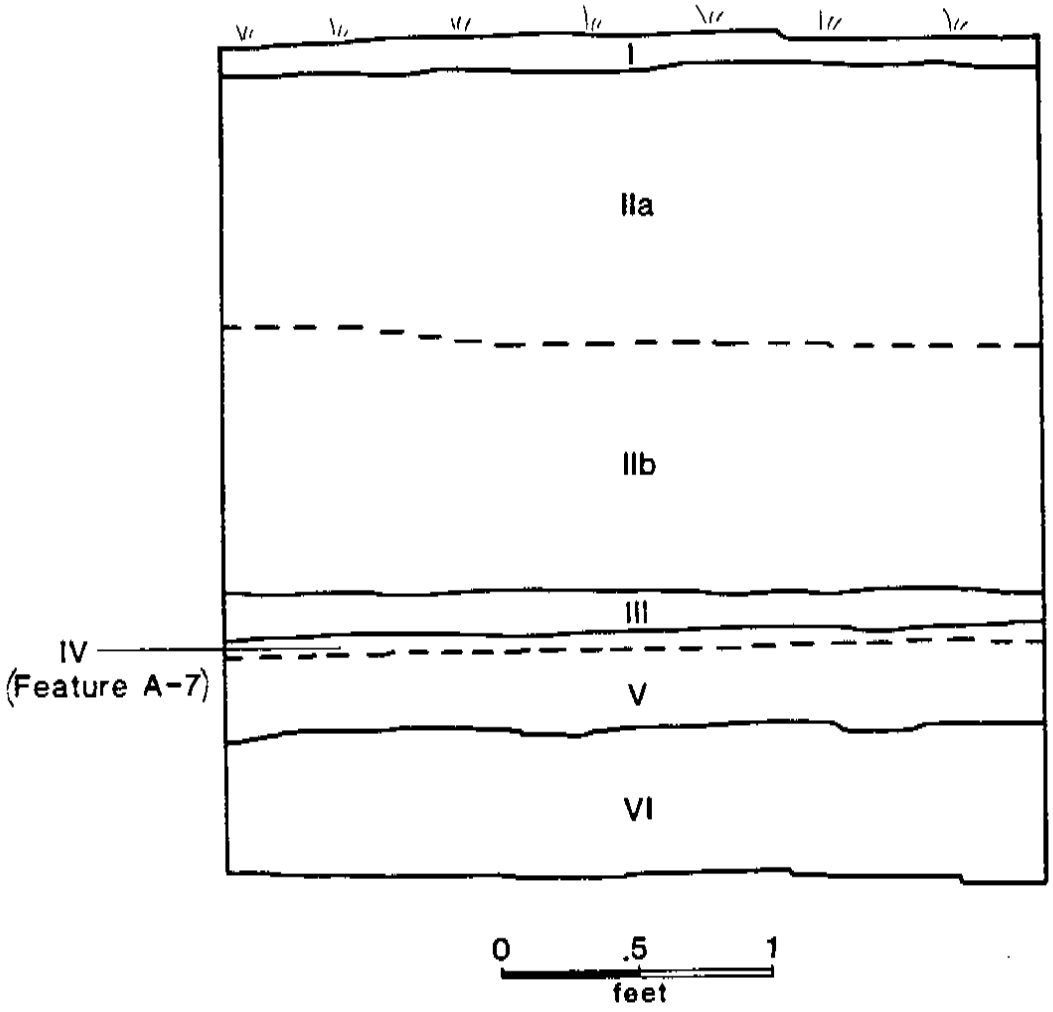
including humus (Figures 43). Beneath this was a thin (0.2 feet thick) tan-gray layer of decomposed mortar and rock fragments. This decomposed mortar layer was lying directly over the intact portions of the foundation feature beginning at approximately 1.95 feet below surface. The medium brown sandy loam fill above this portion of the foundation is identical to that seen above Feature A-1, its northern counterpart, suggesting a single fill episode. A single fill episode is also suggested by background research. The construction of this southern foundation was identical to the northern foundation. In addition, as with the northern foundation, no builder's trench was identified.

Test Unit N54W56.55 was then excavated to approximately 2.35 feet below surface, at which point a thin, poured concrete floor (Level IV, Figure 44) along the interior (northern) edge of Feature A-5 was located. At this point, Test Unit N54W56.55 was excavated to the concrete floor. The concrete floor (Feature A-7) was then seen to abut the foundation in the same manner as seen earlier in Test Unit N64W53.

The concrete floor in N54W56.55 was then penetrated and two natural levels, the deepest of which was sterile, were excavated. Test Unit N54W56.55 was thus excavated to a total depth of 3.25 feet below surface. Immediately beneath the concrete floor, Feature A-7, a layer of medium brown slightly silty coarse-grained sand was encountered from 2.4-2.55 feet below surface (Level V (Figure 44). This level, sealed by the concrete floor, contained nine artifacts: two small fragments of whiteware and seven poorly preserved and non-diagnostic nail fragments.

FIGURE 44

Profile of the East Wall of Test unit N54 W56.55, A. Chandler/Galbreth Site



Soil Key

I Humus

IIa Light brown silty loam

IIb Medium to dark brown loam

III Tan-grey decomposed mortar and small rock fragments

IV Poured concrete floor (Fea. A-7)

V Medium brown slightly silty coarse-grained sand with high density of broken rock

VI Medium orange-brown clayey loam with numerous grey and orange clay mottlings, decomposed schist fragments. Sterile soil

Beneath this was a sterile layer of medium brown clayey loam with numerous orange and gray clay mottlings and fragments of decomposed schist from 2.7-3.25 feet below surface (Level VI, Figure 44). This level of clays and schists is identical to the sterile soils seen during the Phase I Survey in all of the project area and is the result of the in situ decompostion of local bedrock.

Feature A-9, the north-south foundation located in Test Units N45W56 and N48W56 was overlain by a stratigraphy identical to that identified in Test Units N51W56.55 to N57W56.55. Feature A-9 did not abut Feature A-5 (Figure 43). A gap of approximately 2.25 feet separated the two foundations. It was assumed that this gap represented a doorway, but the face of the interior wall (Feature A-9) was found to be rough and unfinished. If it was a doorway, this end would probably have been finished. The construction of Feature A-9 was identical to that of Feature A-5.

Excavation then continued simultaneously along Features A-5 and A-9. It was assumed that Feature A-5, because of its orientation to the east-west foundation first located (Feature A-8) and the concrete floor (Feature A-7), was an exterior wall. Additional test units and measured test trenches exposed the entire length of the foundation and recovered artifacts associated with it. These excavations proved that Feature A-5 was indeed an exterior foundation.

A total of six additional test units were excavated and measured trenches were excavated between them along Feature A-5 to check for interior walls and determine details of construction. Both the eastern and western extremes of Feature

A-5, however, were determined to be disturbed. One portion of Feature A-5 is shown in Plate 10.

The six additional test units excavated along Feature A-5 were, going east from Feature A-9, Test Units N49W50, N47W47, N47W44, and N45W39 (Figure 43). To the west, near Beaver Valley Road, Test Units N57W63 and N60W66 were excavated to determine the extent of the foundation rubble identified during the Phase I survey.

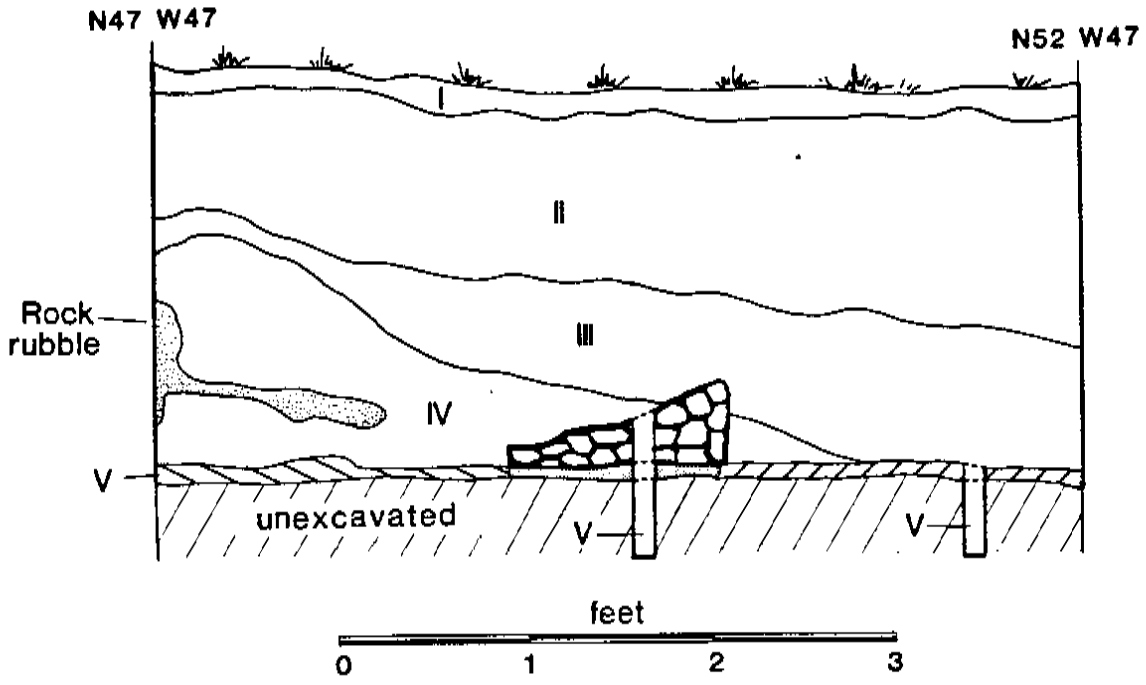
The stratigraphy along the rest of Feature A-5 was similar to that established by Phase I Test Unit A-1 (N54W56.55), the unit first to locate the foundation (Figure 44). A profile of the west wall of Test Unit N47W47, a 5 X 3 ft unit which straddled Feature A-5, shows at least two episodes of fill (Figure 45). Above this foundation, Feature A-5, was a humus and thick layer of medium brown sandy loam fill with numerous orange sand mottlings extending down to approximately 1.2 feet below surface which suggests one discrete episode of fill (Levels I and II, Figure 45). Beneath this, and directly over the foundation, was a tapering strata of tan-brown sand and decomposed mortar with numerous structurally-related artifacts. This level is significantly thicker north of the foundation, the area that would have been the interior of the structure. This strata, Level III in Figure 45, is probably the remains of the upper portions of the foundation and includes demolition fill from the destruction of the structure. North of Feature A-5, in the interior of the structure, this layer of decomposed mortar and sand is lying on a mottled gray-black, very dense and hard-packed

PLATE 10

Feature A-5 Looking West, A. Chandler/Galbreth Site

FIGURE 45

Profile of the West Wall of Test Unit N47 W47, A. Chandler/Galbreth Site



Feature A-5 Feature A-10 Feature A-11 Feature A-12

Soil Key

I–Humus

II–Medium brown sandy loam fill with numerous orange sand mottlings, little clay

III–Tan brown sand and decomposed mortar. Numerous gray sand pockets

IV–Dark black brown silty sand with numerous historic artifacts

V–Medium brown clayey loam with numerous decomposed schist fragments. Very moist and clayey, sterile

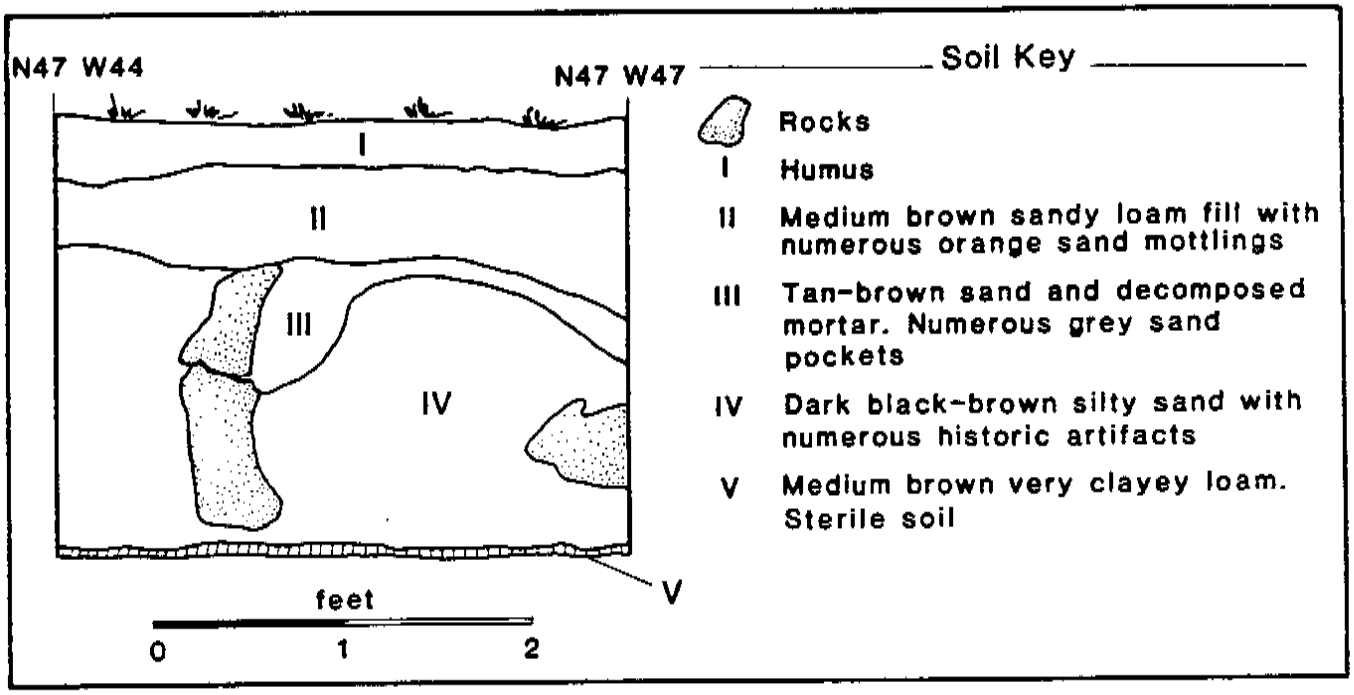
earthen floor. This layer of dark, very compact silty sand was labelled Feature A-10 and probably represents part of the floor of the structure. No evidence of the concrete floor that appears approximately nine feet to the east in test unit N54W56.55 at 2.25 feet below surface was located. One auger test was excavated through the packed silt floor and identified a sterile clay loam with numerous decayed schist particles immediately beneath the floor. These clay loams and decayed schists represent sterile soils throughout the project area and are the result of the in situ decay of local bedrock. These suggest that the floor of the structure was not entirely composed of poured concrete.

One section of Feature A-5 was then removed in N47W47 to sample beneath it. This foundation was found to lie upon a thin layer of hard-packed sand and gravels, which was labelled Feature A-11. This soil was probably deposited as a base for the foundation. This area beneath the foundation was then augered and found to be underlain by a sterile clay loam and decomposed schists, identical to soil VI in Figure 44 and that found under the packed floor.

South of the foundation, along the exterior of the structure, a thick, but partially disturbed layer of dark brown silty sand was encountered below the sand and decomposed mortar layer. This dark brown layer appears as Level IV in Figure 45. As shown in this profile, this layer is quite uneven and appears to be partially disturbed, both vertically as seen in Figure 45, and horizontally, as can be seen in the profile of the south wall of N47W47 shown in Figure 46. This partial disturbance probably occurred during the demolition and subsequent fill of the

FIGURE 46

Profile of the South Wall of Test Unit N47 W47, A. Chandler/Galbreth Site



structure. That this strata has been partially disturbed is also supported by the presence of a small amount of this artifact-rich sandy silt found immediately south of the foundation where it probably had been deposited during the demolition of the structure. That this layer is partially disturbed is also supported by the presence of a small pocket of the artifact-laden sandy silt immediately north of the foundation, along the interior of the structure.

This layer, first located in Test Unit N47W47 and described as Level IV in Figures 45 and 46, was extremely rich in historic artifacts. This dark brown silt level was found in varying quantities in the other three test units excavated along Feature A-5: N49W50, N47W44, and N45W39 (Figure 43). Numerous mid-to-late nineteenth and early twentieth century historic artifacts

were found in this dark brown silt level in all four units. This level even contained one prehistoric artifact, a 3/4 grooved axe, a type commonly attributed to the Woodland I Period (3000 B.C. to A.D. 1000). This prehistoric artifact found in Test Unit N47W47 represents a spot find within a disturbed context and is not associated with any known prehistoric site.

Historic artifacts recovered from this layer along Feature A-5 included numerous mid-to-late nineteenth century ceramic sherds (largely whitewares and redwares), animal bones (primarily pig and beef), bottle and tableware glass fragments, intact pharmaceutical bottles, and the ubiquitous structurally-related artifacts (predominantly window glass and wire nails). It should be noted, however, that significantly more structurally-related artifacts were recovered from the tan-brown decomposed mortar and medium orange-brown fill layers overlying the silt layer over the entire excavated length of Feature A-5. This higher concentration of structurally-related artifacts within the upper strata of the site compared to the higher concentration of domestic artifacts in Level IV is consistent with the sequences of fill identified in N47W47 (Figures 45 and 46).

Table 7 contains a summary of all the historic artifacts associated with Feature A-5 recovered in Test Unit N47W47. In this table, artifacts are listed for both Level III, the tan-brown decomposed mortar and sand and Level IV, the dark brown artifact-rich silt directly atop the foundation (Figure 45). Both of these levels are included to show the mixing that occurred during the partial disturbance of Levels III and IV as

TABLE 7

INVENTORY OF HISTORIC ARTIFACTS ASSOCIATED WITH FEATURE A-5 RECOVERED DURING PHASE II TEST EXCAVATIONS IN N47W47

	Level III	Level IV
Ceramics		
Redware	1	11
Whiteware	5	3
Pealware		
Ironstone	1	1
Stoneware		
Glass		
Bottle		
Liquor	1	
Medicine		10
Unident.	18	8
Jar		
Tableware		
Lamp	3	15
Unident.	8	
Structural		
Brick		
Nails		
Cut	3	6
Wire	10	20
Unident.	9	8
Bolts and screws	1	
Window glass	16	11
Drain pipe		
Unident. ferrous	20	
Bone		
Pig		2
Cow		7
Sheep		
Bird		
Rodent	1	
Unident. Mammal		
Miscellaneous		
Shell casings	3	2
Radio tube frags.	3	
Tableware (metal)	2	
Button	1	
Safety pin		1
Brass coat hook		1

seen in the profiles of the south and west walls of Test Unit N47W47 (Figures 45 and 46). These artifacts recovered in this unit are typical of those recovered in association with Feature A-5 in the other test units and test trenches excavated along it. As with all of the other test trenches excavated during the Phase II Survey, these test trenches were excavated only deep enough to locate the top of the foundation in order to locate interior walls and to determine its integrity.

A total of 206 historic artifacts were recovered from Levels III and IV of Test Unit N47W47. No prehistoric artifacts were recovered. The majority of these artifacts were structurally-related nails, nail fragments, and window glass fragments (84 total; 48 for Level III, 36 for Level IV). That Level III contained almost 25% more structurally related artifacts supports the association of this layer of tan-brown decomposed mortar and sand above Level IV with the destruction of the structure as suggested by the soil profile of the west wall of the unit.

As can be seen in Table 7, the next most common general artifact type recovered from these levels was bottle and lamp glass fragments. In Level III, at least 5 different bottles (one of brown glass and four of clear glass) are represented. In Level IV, at least 5 additional bottles are represented. One of the minimum vessels represented in Level III, a sharply shouldered brown bottle, is represented by two small fragments and had some type of beaded seal. One of the two brown glass fragments recovered in Level III, a small rim and shoulder fragment, cross-mended with a rim fragment from Level IV. This is additional evidence of partial disturbance and mixing between

the two levels. One of the other bottles represented in Level III is a large bottle neck and partial shoulder fragment of a large aqua-colored bottle with a slightly contracting applied rim and mold marks from a semi-automated two-piece mold. Bottles of this type were commonly produced from 1850 to 1913, a date consistent with the known occupation of the A. Chandler/Galbreth site (Newman 1970:70-75; Miller and Sullivan 1984:83). This artifact is shown in Plate 11.

One intact and one partially intact pharmaceutical bottles were also recovered from Level IV. The intact bottle, a small patent medicine bottle, is shown in Plate 12. This bottle was found up against the interior of Feature A-5, the foundation, and is embossed with the letters "THE CELEBRATED / H H H MEDICINE / D. D. T. 1868." This bottle has a straight applied lip and has mold marks from a two piece mold and is aqua in color, characteristics typical of a wide range of patent medicine bottles produced beginning in the mid-nineteenth century.

Also recovered from Level IV was a partially intact aqua colored panel bottle. The front panel of this vessel, with the embossed letters "...VER OIL," is shown in Plate 13. From the size of the bottle and this fragmentary inscription, it is likely that this bottle orignially contained cod liver oil. None of the fragments are from the shoulder, neck, lip, or other seam areas and therefore specific details of construction are not known.

Other types of glass associated with Feature A-5 are thin, clear and frosted lamp glass fragments. Significantly more of these lamp glass fragments were found in Level IV than Level III

PLATE 11

Selected Historic Artifacts from Levels III and IV, Test Unit N47 W47, A. Chandler/Galbreth Site

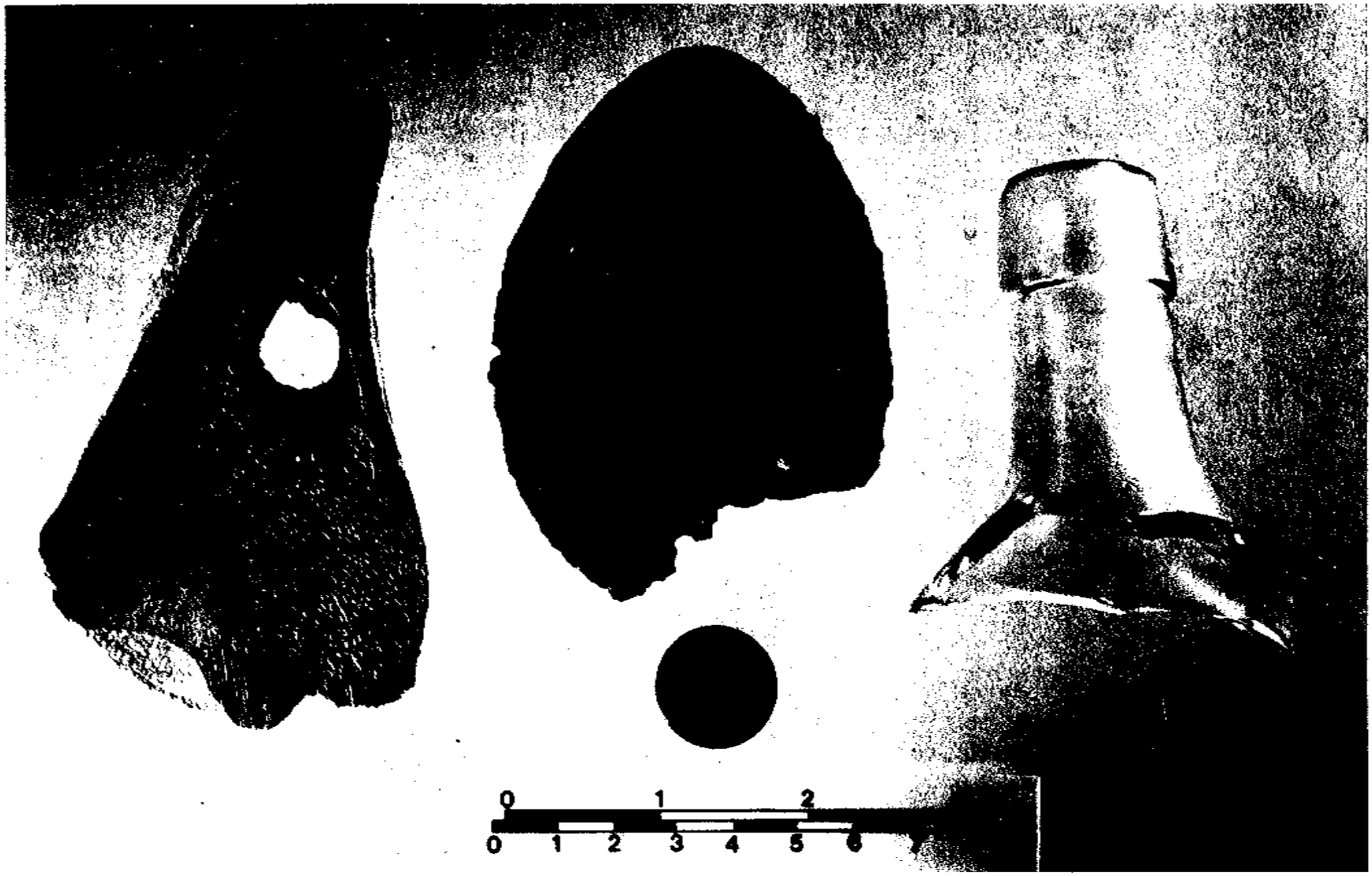


PLATE 12

Intact Patent Medicine Bottle from Level IV, Test Unit N47 W47, A. Chandler/Galbreth Site

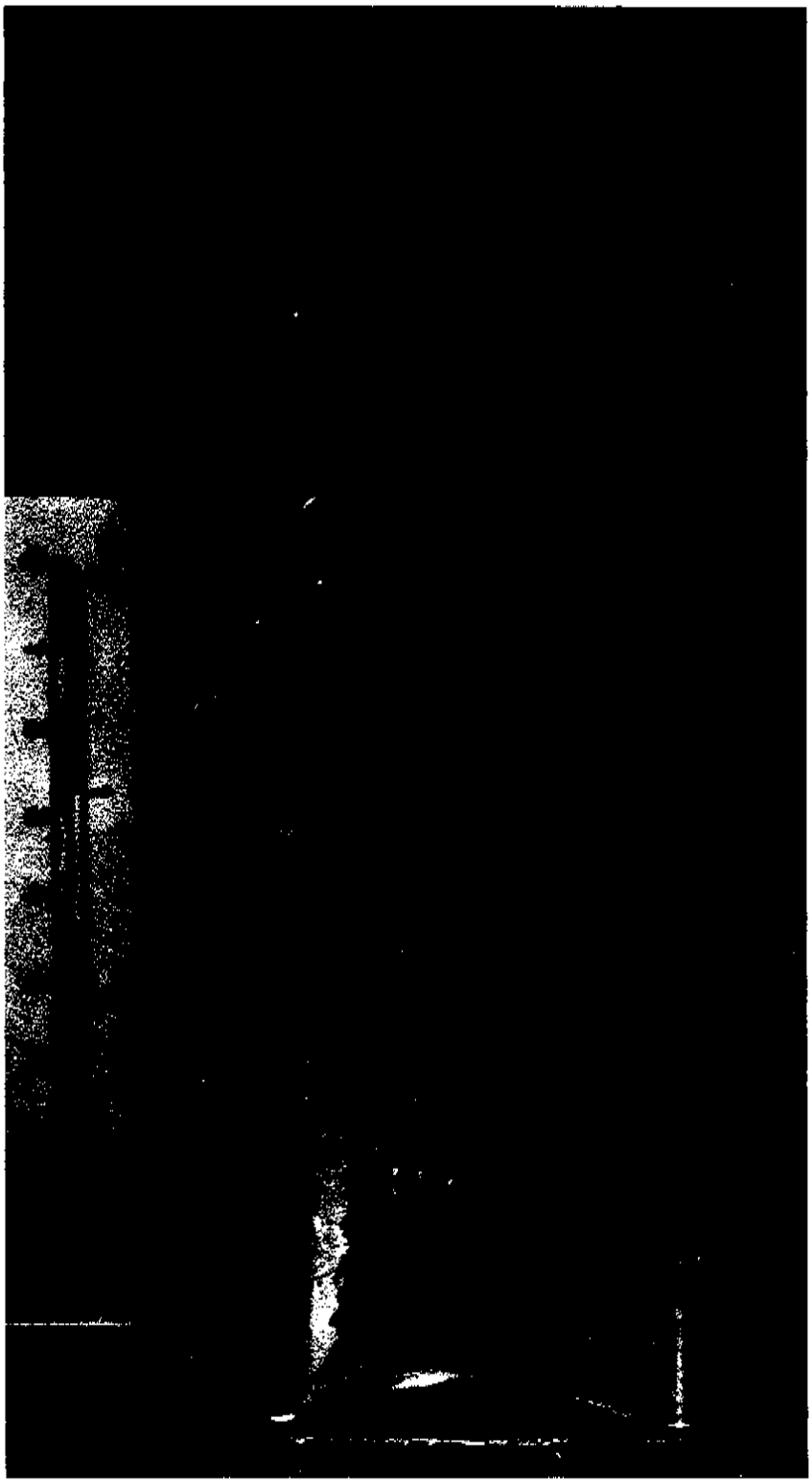
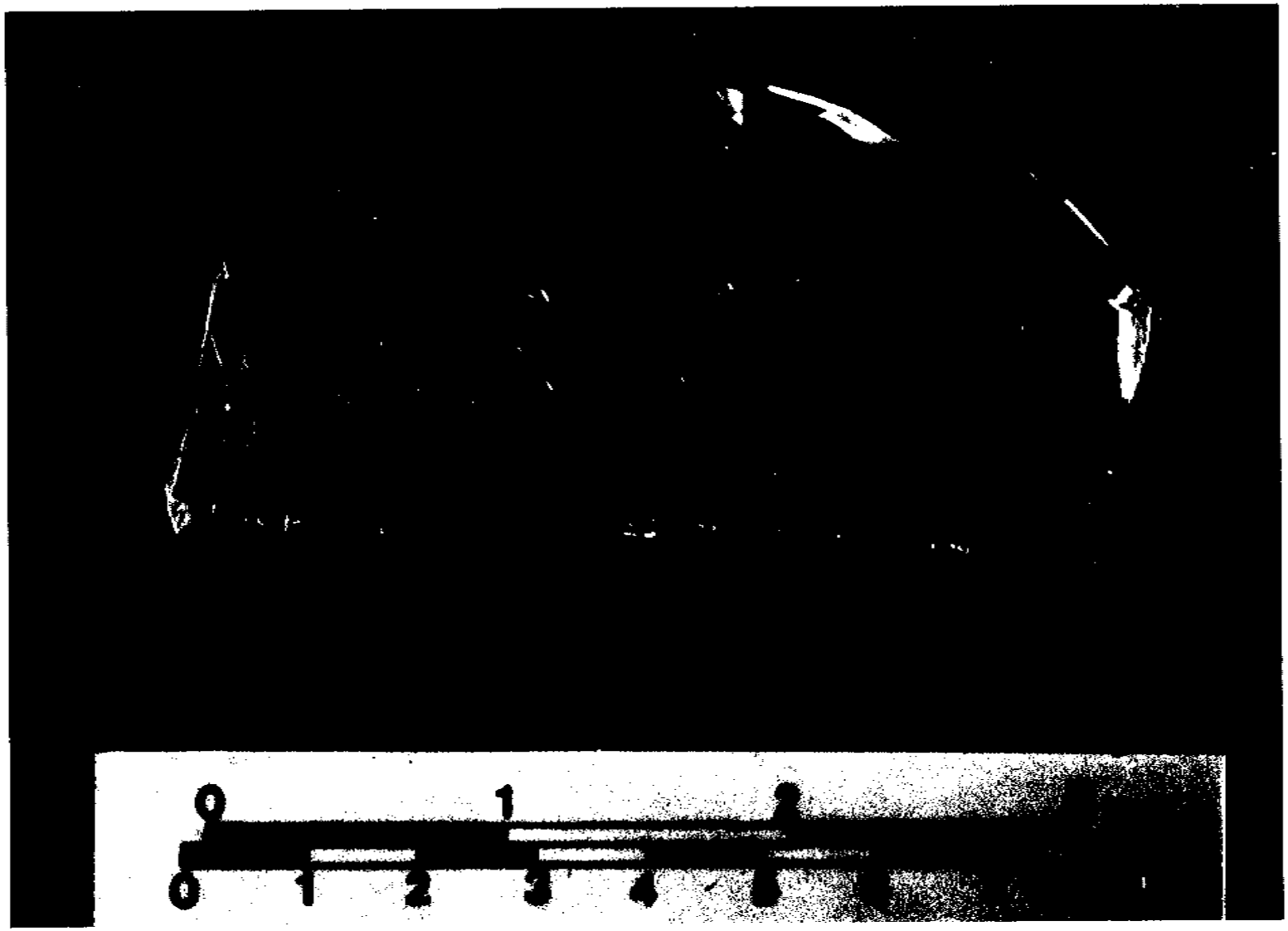


PLATE 13

Panel Bottle Fragment from Level IV,
Test Unit N47 W47, A. Chandler/Galbreth Site



(Table 7). No cross-mending was attempted because of the very small size and poor preservation of these fragments.

In general, the ceramics associated with Feature A-5 and recovered in Test Unit N47W47 were whitewares, redwares and ironstones typical to the mid-to-late nineteenth century. No pearlwares or transitional pearlware/whitewares were found. All of the ceramics recovered from both levels were small and relatively non-diagnostic as to form, except for one partially complete basal fragment from an ironstone plate. This sherd contains part of a maker's mark and has a simple flattened ring foot. The maker's mark includes the inscription "Ironstone China / James F. Wileman" and an English heraldic symbol of a rampant lion and unicorn and the inscription "Dieu Et Mon Droit"/Richelieu Shape." According to Coysh and Henrywood (1982:401) the Wileman family produced ceramics under the imprint "James F. Wileman" from 1869-1892. This date is consistent with the known occupation of the site.

One other dated artifact was recovered in association with Feature A-5. This artifact was a hard rubber, four-hole button recovered from the shallower Level III. This button is inscribed "Goodyear's / P-T. 1851 / N. R. Co." and represents a relatively common artifact in mid-to-late nineteenth century historic sites.

Some additional trends in the distribution of historic artifacts associated with Feature A-5 can be made from the data from Test Unit N47W47. These general trends are consistent with those seen during excavation of the other test units and test trenches along Feature A-5 and as recorded in the field. One trend is that most animal bone recovered from Feature A-5, the

area with by far the highest concentration of animal bone in the site, tended to be in Level IV and not Level III. In N47W47, nine bone fragments, eight of which were subsistence-related, were recovered. All eight of the subsistence-related bones were found in Level IV. The one bone artifact found in Level III was a mouse mandible fragment and does not relate to human subsistence activities. The eight animal bones found in Level IV consisted of the butchered remains of at least one adult cow, one adult pig, and one chicken. These eight bones consisted of one bird long bone, probably chicken; one sawed pig rib and one other fragmentary pork rib; and five beef bones, of which four were longbones and one a rib. All of the beef and pork bones had saw and knife butchering marks.

The amount of butchered bone from along Feature A-5 and from other areas in the site is consistent with the function of the site as determined by background research. Amor Chandler (Sr.) who built the store was himself a butcher and until the close of the store in the early twentieth century, at least one and usually two butchers were operating in Beaver Valley from this store.

Evidence of contextual mixing, however, was also found in Level IV in N47W47 and in other units along Feature A-5. In the same context as the bone and the dated bottles and ceramics, were two late nineteenth to early twentieth century .22 rimfire shell casings. These casings, and the firing pin marks, are similar to those found more abundantly in Level III of the test unit. This supports the evidence of partial mixing seen in the soil profiles

and the refit of the brown bottle glass neck fragments between Levels III and IV. Other evidence of disturbance was seen in the poor preservation of significant parts of the feature. In two test units (N47W56 and N47W47) parts of the foundation were observed to be completely disturbed and at other locations, only one or two courses thick as can be seen in Figure 45.

With much of the northern east-west wall (Feature A-8) and the southern east-west wall exposed, work continued along Feature A-9, the north-south foundation perpendicular to Feature A-5 first located by Test Unit N48W56 (Figure 43). This foundation was assumed to be part of the same addition as Feature A-13, the north-south foundation located approximately 15 feet to the east as located by Test Unit N44W44 (Figure 43). This assumption was proved correct by further Phase II testing.

A total of eight additional test units were excavated along Features A-9 and A-13. Upon completion of the units, measured test trenches were excavated along the foundations to check for interior walls and to determine the integrity of the features. The location of these units and of the two features as located by all Phase II are included in Figure 43.

The stratigraphy seen along Features A-9 and A-13 was identical to that located along Feature A-5 (Figure 45). Both of the foundations were overlain by a layer of dark brown, artifact rich silt of variable thickness from approximately 0.85-1.2 feet below surface. This level corresponds to Level IV in N47W47 (Figures 45 and 46). The two foundations extended from approximately 1.2-1.8 feet below surface, although the foundations varied significantly in preservation. Above the dark

brown silt was a thin layer of light brown sandy loam fill with numerous tan-gray pockets of decomposing mortar from approximately 0.60-0.85 feet below surface. This layer, corresponds to Level III in Test Unit N47W47 (Figures 45 and 46). Above this was a layer of humus and dark brown silty loam fill. Evidence of mixing was seen along both of the foundations between the dark brown silt along the foundations and the dark brown silty loam and decomposed mortar levels above it.

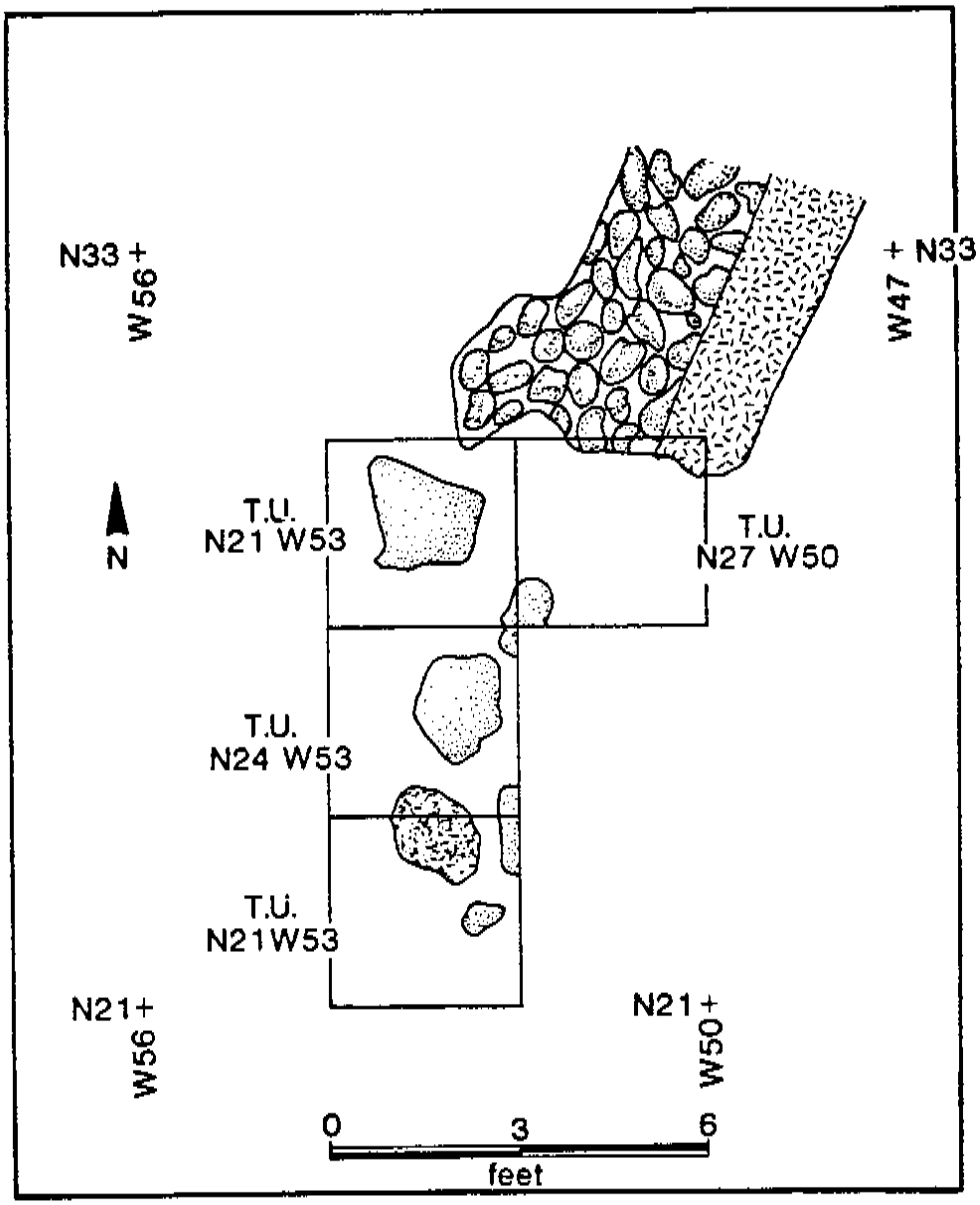
Test trenching along Feature A-13 located a large concrete slab with a pronounced drip line along the exterior of Feature A-13 beginning approximatley five feet south of Test Unit N44W44 and extending to the southernmost end of the wall in Test Units N27W53 and N27W50. This slab and Feature A-13 are shown in Figure 47.

Along both foundations (Features A-9 and A-13), evidence of three supports, probably for posts, were located. Two of them appeared along Features A-9 and A-13 approximately 10 feet from Feature A-5, the interior east-west foundation. These secondary features were relatively amorphous mortar and small stone projections approximately 1.5 by 1.0 feet in size and located along the interior of the two foundations. Both of these were heavily disturbed, particularly along the edges.

The third evidence of a support along this southern extension of the structure was located about 5 feet south of the southernmost end of Feature A-13 in Test Unit N21W53. Immediately below the thin light brown sandy loam and decomposed mortar fill, a roughly circular pocket of very loosely packed,

FIGURE 47

Location of Features A-13 and A-16, A. Chandler/Galbreth Site



Feature A-16

Concrete slab

Feature A-13, Stone and mortar foundation

Rock

T.U.-Test unit

homogeneous gray-white decomposed mortar and sand beginning at approximatley 1.9 feet below surface. Once uncovered, this pocket was labelled Feature A-16. A number of large, but displaced rocks, some with evidence of mortar were found around the feature and the other areas excavated along the southern ends of Features A-9 and A-13. The location of Feature A-16 in relation to Feature A-13 is shown in Figure 47.

Upon excavation, Feature A-16 was found to be relatively shallow, approximately 0.3 feet deep and contained only a few small wire, brick, and mortar fragments. No matching features were seen along Feature A-9. Indeed, no other evidence of an east-west wall between Features A-13 and A-9, however, was located. Test Units N24W53, N27W53, and N30W56 tested between the two north-south foundations, but did not locate any intact east-west foundation. In addition, test unit N30W56, located halfway between Features A-9 and A-13, located sterile and undisturbed soils beginning at 2.0 feet below surface. Given these factors, it is likely that Feature A-16 represents the base of a large post that was part of a frame wall with no foundation that partially enclosed the room bounded by Features A-9 to the west, A-13 to the east and A-5 to the north.

With the two main east-west exterior walls defined and a southern extension established, attention was turned towards the two exterior north-south walls that would have connected the two east-west foundations, Features A-5 and A-8. Evidence of a disturbed western north-south wall was identifed in Test Unit N60W66. Two additional units and limited test trenching were excavated in the area and the first indication of an almost

completely disturbed north-south foundation confirmed. The location of all the Phase II and earlier Phase I tests and the disturbed foundation as located by them is shown in Figure 43.

Once this western end of the structure was determined to be disturbed, attention was turned to the eastern end of the structure. The northern east-west foundation, Feature A-8 had been located as far east as Unit N59W32. A total of 39 square feet in three measured test units and approximately 40 square feet of measured test trenches were excavated. As with the western north-south foundation, this eastern foundation was found to be disturbed, although it was slightly more intact than its western counterpart.

The three test units excavated along the eastern end of the first structure were N53W26 (5.5 X 3 ft), N53W23 (5 x 3 ft), and N47W24 (3 X 3 ft). Test Unit N53W23 located the first evidence of the disturbed north-south wall, labelled Feature A-14. This test unit located the northeast corner of the structure and approximatley 2.5 feet of Feature A-14. At this corner, however, Feature A-14 was observed to be only 0.7 feet wide and only one course thick as compared to Feature A-8, the east-west foundation that was consistently 1.5 feet wide and 2-3 courses thick. Other evidence of disturbance was seen in the large amount of displaced stone and decayed mortar evident in the unit above the feature. Another test unit was then excavated to the south to locate more of the foundation. This test unit, N47W24, located an even less intact part of the foundation and its southernmost end. A test trench was then excavated along the approximately 3

feet of Feature A-14 between the south wall of N53W23 and the north wall of N47W24. A floor plan of Test Units N53W23 and N47W24 and the test trench showing the extent of the intact portions of Feature A-14 is given in Figure 43. As can be seen in this floor plan, Feature A-14 was found to be only 0.7 feet wide at its greatest and tapered to only 0.5 feet thick at its terminus in N47W24.

Numerous displaced rocks, many with evidence of mortar were located atop Feature A-14 in all of the Phase II excavations in the area. Artifacts recovered from these units showed a significant degree of mixing with early twentieth century 0.22 caliber shell casings found in Level III, immediately above the foundation. Large numbers of structurally-related artifacts, particularly wire nails and window glass fragments, were also recovered from the disturbed soils associated with Feature A-14.

By this point, all four major exterior walls of structure 1 of the A. Chandler/Galbreth site had been defined. The two east-west foundations, Features A-5 and A-8 were found to be the most intact, although both of these showed evidence of partial disturbance in the stratigraphy and the artifacts recovered. Portions of each of these exterior foundations were also found to be completely disturbed, particularly along the eastern and western edges. All four exterior corners of the store and post office structure were found to be disturbed, as were both of the north-south exterior walls.

A total of three rooms, including one southern ell, were located, as shown in Figure 43. The westernmost room, that closest to Beaver Valley Road, was bounded by Feature A-5 along

the south, A-8 along the north and an interior wall (Feature A-13) to the east. This room was found to have a partial concrete floor. A large, displaced stone slab was found in N60W66 and probably related to an entrance to the structure. The second room, bounded by an interior wall (Feature A-13) to the west and Features A-5 to the south and A-8 to the north. This room was found to contain no concrete floor. The third room, contained within the southern ell, was bounded by Features A-9 along the west, A-5 to the north, and A-13 to the east. To the south the ell may have been open or enclosed, perhaps only partially, by a wooden frame wall or shed as suggested by a large post mold (Feature A-16) approximately 10 feet south of the eastern foundation (Feature A-13).

Artifacts recovered from the first room, the one closest to Beaver Valley Road, and the third room, the southern ell, included significant amounts of butchered beef and pork bones. This is consistent with documentary research, that established the structure as a store, and by the occupations of the owners, as also probably a butcher shop. These deposits, however, were not as intact or diagnostic as those described for Feature A-5 in N47W47. Given these factors, it is likely that the first room, with its partial concrete floor, relates to butchering activities, as such a floor is much more sanitary than wood or packed earth and is common to commercial butchering operations of this period.

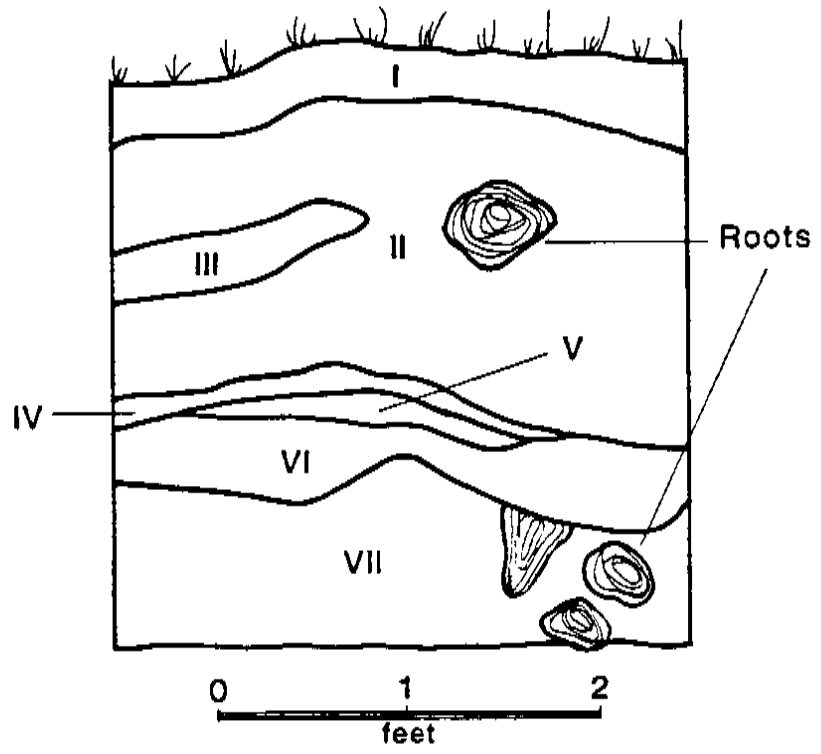
Three test units were then excavated in the second room in order to compare the artifact assemblage recovered there with the

other two rooms. These units were also excavated to determine the stratigraphy of the fill within the structure. The location of these three test units, N47W31, N50W35, and N52.5W31, within the second room is shown in Figure 43. The artifacts recovered and stratigraphy established in N47W31 are representative of those established in the other two units.

Just south of Test Unit N47W31 a micaceous stone and mortar cap and the stone and mortar rubble remains of the southeast corner of the structure were located. This area showed evidence of mechanical disturbance probably related to the demolition of the structure. The stratigraphy of the various fill levels within the unit can be seen in the profile of the south wall of the unit (Figure 48). The first natural level encountered was a relativley thick humus that extended to approximately 0.3 feet below surface. Beneath this was a thick layer of medium brown silt loam from 0.3 to approximately 1.6 feet below surface (Level II, Figure 48). Historic artifacts recovered from these two levels consisted of numerous, but relatively non-diagnostic late nineteenth to early twentieth century redwares, whitewares, and non-diagnostic clear bottle glass fragments. Also recovered from these levels were numerous wire nails and nail fragments and window glass fragments. No ceramics or other diagnostic artifacts that could possibly date to earlier than the mid-nineteenth century were found. This assemblage of artifacts is similar to that recovered in all of the other areas of the structure excavated, with the exception of the large amounts of butchered bone located in the western room. These two levels

FIGURE 48

Profile of the South Wall of Test unit N47 W42, A. Chandler/Galbreth Site



Soil Key

I Humus

II Medium brown silt loam fill with numerous or sand mottlings

III Medium orange-brown coarse sandy loam with pockets of coarse sand and grey silt

IV Medium grey-brown coarse sandy loam

V Grey-tan pinkish coarse sand with numerous flecks of decomposed oyster shell and whitewash

VI Light to medium brown silt loam

VII Medium or brown sandy silt

represent soil deposited at the site after it was filled in sometime in the early twentieth century.

Underlying these two levels at approximately 1.6 to 2.3 feet below surface were three distinct bands of brown sandy loam. These three levels did not extend over the entire unit and probably represent pockets of slightly different soils within one fill episode. These levels graded from a coarse gray-brown sandy loam in the uppermost level (Level IV) to a lighter gray-tan coarse sandy loam with numerous flecks of decomposed shell and whitewash (Level V) and finally, to a darker, more finely grained and homogeneous brown loam (Level VI, Figure 48). Fill levels IV-VI were removed as one excavation level. There is no evidence that these three slightly different levels of fill represent more than one fill episode.

Beneath this was a homogeneous level of medium orange brown sandy silt from approximately 2.4 feet below surface to the limit of excavation at 3.0 feet below surface. Located in the western half of the unit were numerous large rocks, some of which showed evidence of mortar. These rocks are probably associated with those parts of the disturbed foundation (Feature A-5) to the south.

The artifacts recovered from these last two groups of strata are summarized in Table 8. In Levels IV-VI, the majority of the artifacts recovered were structurally-related artifacts, particularly 177 wire nail and nail fragments and 86 window glass fragments. Significantly more of both these types of artifacts were found in these levels than in the humus and medium orange brown sandy loam fill levels above it. Historic ceramics

TABLE 8

INVENTORY OF HISTORIC ARTIFACTS FROM TEST UNIT N47W42

	Level IV-V	Level VI	Level VII
Ceramics			
Redware	69	39	1
Whiteware	3	33	1
Pealware			
Ironstone			
Stoneware			
Yellowware		3	
Tin-glazed		2	
Glass			
Bottle			
Liquor			
Medicine			
Unident.		13	2
Jar		1	
Tableware			
Lamp	9		
Unident.	14		
Structural			
Brick	5		
Nails			
Cut			
Wire			
Unident.	174	103	3
Bolts and screws			
Window glass	17	69	
Drain pipe			
Unident. ferrous			
Bone			
Pig			
Cow			
Sheep			
Bird			
Rodent			
Unident. Mammal		11	
Miscellaneous			
Shell casings		2	
Oyster shell		4	

recovered from Levels IV-VI and VII were comprised of mainly redwares and whitewares. Three small and heavily weathered yellowware and tin-glazed earthernwares recovered from Level VII

were the only other ceramics recovered. As with these sherds, the redwares and whitewares recovered from both of these levels were very small and heavily weathered. The redwares recovered were from predominantly rather coarse and utilitarian wares, although some fragments of more refined wares were recovered. Due to the small size and poor preservation of all the ceramics recovered, the exact forms of the redware vessels represented cannot be determined. Large utilitarian storage vessel and smaller plate and cup/bowl forms, however, seem to predominate.

The whiteware fragments recovered from Levels IV-VI and VII were equally small and poorly preserved and therefore relatively non-diagnostic. Significantly more whiteware fragments recovered in Test Unit N47W42 came from Level VI (33) than Levels IV-VI (3, Table 8). The majority of the whiteware fragments found in Level VI were plain, with neither molding nor transfer-printing, and either of a cup or saucer/plate form. Three of the whiteware fragments were decorated, however, with a dark purple transfer-print usually dating to the late nineteenth and early twentieth centuries. Another ten fragments were decorated with a thick, bright green, blue, and pink glaze similar to that of what is commonly called "Fiesta wares."

Component 2 (Galbreth House) - The second component of the A. Chandler/Galbreth site tested by Phase II excavations was the house built by Thomas Galbreth and identified by informants and background research. According to informants and deed research, Thomas Galbreth purchased the property in 1900 and lived in the store and post office built by Amor Chandler (Component 1) until

it became too deteriorated for habitation. By this time, Galbreth opted to build a new house behind the store rather than to attempt to repair the older structure. Galbreth built this house sometime after 1916 and before 1940 when it was destroyed by the present owners of the property, Woodlawn Trustees.

The goal of the Phase II excavation on this second structure was to locate and define the extent of the structure, the overall archaeological integrity of the site, determine the nature of its construction and to sample the artifacts within it. One foundation of the structure had been identified during the Phase I Survey in Shovel Test S0W30 and Test Unit S3W28 (Figure 20). This foundation was observed to be east-west in orientation and was assumed to be the southern exterior wall of the structure as it was unlikely that the structure extended any further to the south because of the slope towards terrace 2.

The northern east-west exterior foundation was first located by Phase II excavations along the disturbed southeast corner of structure 1, the old store and post office. At this time, the disturbed portions of the southeast corner of Structure 1 were found to abut a portion of a darker, poured asphalt/concrete foundation similar in construction to that identified during the Phase I Survey in S3W28. This northern east-west foundation was labelled Feature A-19. Feature A-19 was later used to describe all of the interior and exterior foundations of the Galbreth structure.

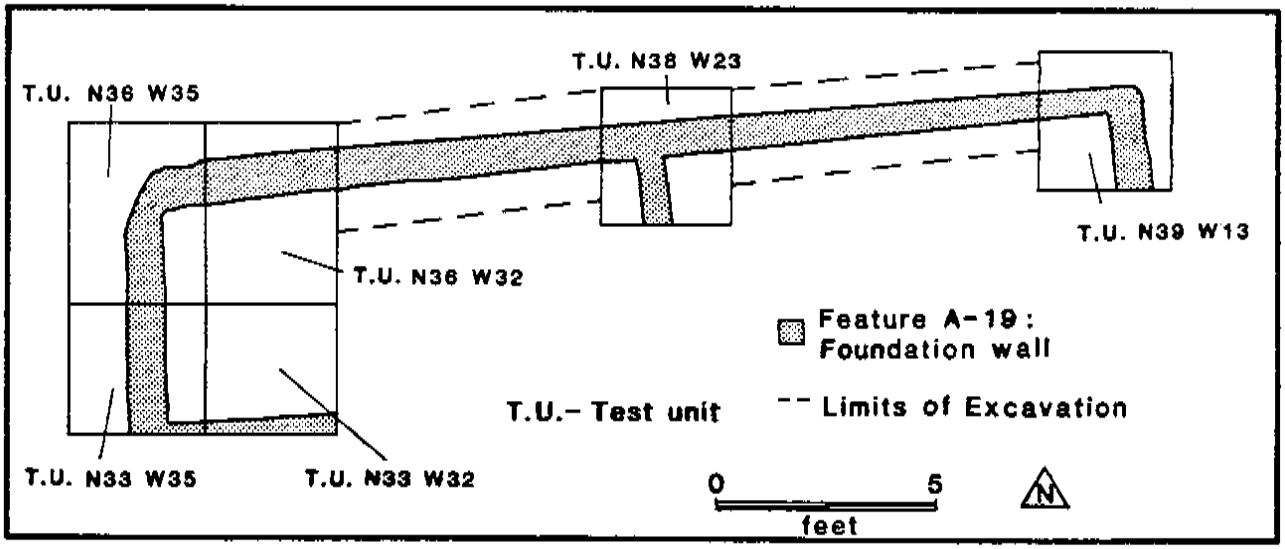
Phase II excavations at the Galbreth structure began by continuing along the two east-west foundations already located in an attempt to find the corners of the structure. The northwest

corner of the structure and the western north-south foundation were the first additional structural elements located.

The northwest corner of the structure was located by the first group of test units excavated along Feature A-19. This series of 4 test units, N36W35 to N33W35 and N36W32 to N33W32, a total area of 9 X 8 feet, located the remains of the northwest corner of the structure, the western north-south exterior foundation, and one interior east-west foundation. These four test units and the foundations located within them are shown in Figure 49.

FIGURE 49

Extent of the Northernmost Portion of Feature A-19, A. Chandler/Galbreth Site

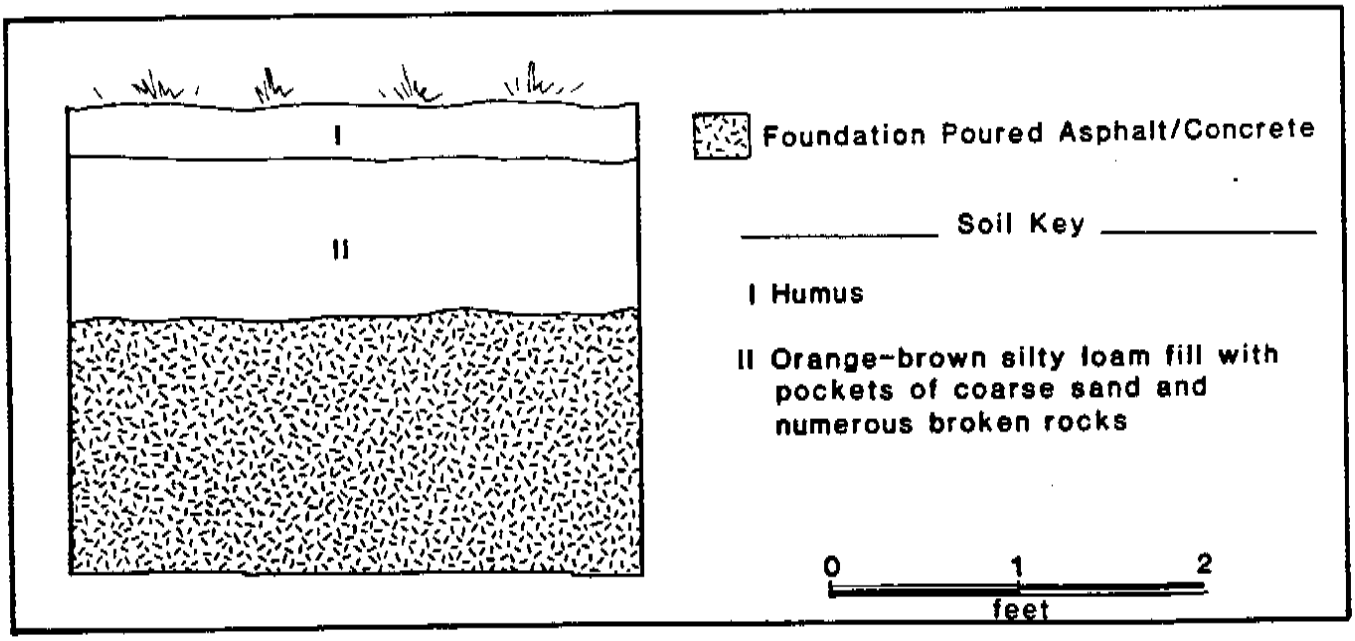


In these test units, the two exterior foundations that form the northwest corner of the structure were found to be approximately 1.0 feet wide. Both of these walls tapered to a uniform thickness of approximately 0.6 feet wide within six feet

of the corner. The interior wall was a uniform 0.6 feet wide. All of the foundations were of identical construction: a dark, gray-black, and very hard-packed poured asphalt/concrete. The basic material appeared to be a form of dark concrete composed primarily of bits of asphalt, coal ash, and gravel. This material appears to have been deposited in a liquid or semi-liquid state as evidenced by mold and seam marks along the foundation approximately 0.5 feet below the top of the surviving portions. Above the foundation was a uniform layer of orange-brown silty loam fill with numerous rock fragments from approximately 0.3 to 1.1 feet below surface and a humus above that. This stratigraphy can be seen in the profile of the east wall of Test Unit N36W32 as shown in Figure 50.

FIGURE 50

Profile of the East Wall of Test unit N36 W32, A. Chandler/Galbreth Site



The artifacts recovered from the humus and fill levels above Feature A-19, the northern east-west exterior foundation, in

N33W42 included numerous structurally-related artifacts, particularly window glass and oxidized wire nail fragments, and only a few ceramics, of which almost all were late nineteenth to early twentieth century whitewares and ironstones. The humus contained 39 window glass fragments and 100 heavily oxidized nail fragments. The only other artifacts recovered from this level was one small nineteenth century kaolin pipe fragment and one small brick fragment. Level II, the orange-brown silty loam fill above the foundation, contained 402 window glass fragments and 465 nails and nail fragments. Ceramics from this level, however, were comparatively scarce--Level II contained only 4 whiteware, 1 redware, and 3 ironstone sherds. All of these ceramics are relatively recent and date to the late nineteenth to early twentieth century.

With the orientation of the northern east-west foundation (Feature A-19) established, additional test units were then excavated along it to locate the northeast corner of the structure. Two test units, N38W23 and N39W13, were placed approximately ten feet apart along the foundation to test for the corner. After the foundation was located in each of these units, test trenches were excavated between the units to expose the feature and check for interior walls.

Test Unit N38W23 located an interior wall and Test Unit N39W13 located the northeast corner of the structure. A 3 X 3 ft Test Unit, N35W23, was then excavated south of N38W23 to define more of the north-south interior wall and to determine the stratigraphy of the fill within the structure.

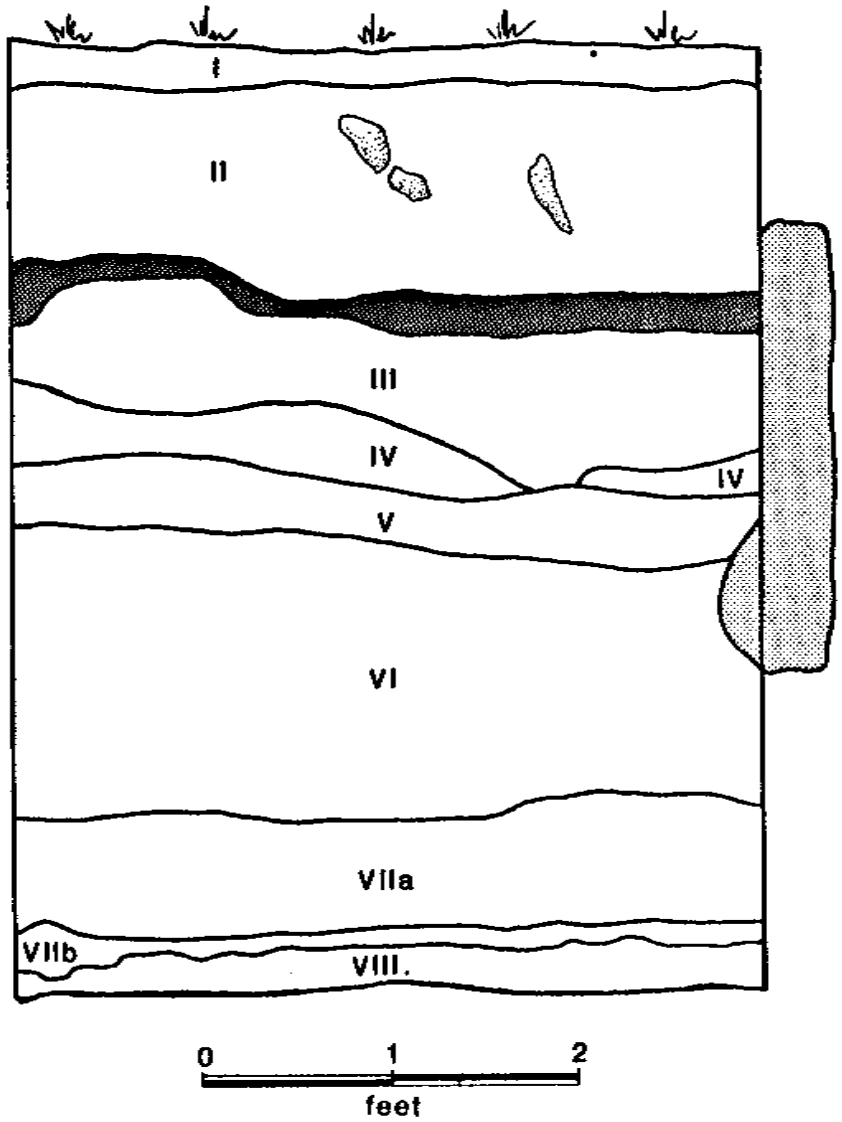
Test Unit N35W23 located the north-south interior wall at approximately 1.2 feet below surface. Very loosely-packed and pocketed soil was observed at this depth along the south wall of the unit and the unit was extended one foot to the south to investigate. At approximately the same depth, another east-west foundation was encountered. This foundation corresponds to that first located in Test Units N33W35 and N33W32. All of the foundations located thus far are shown in Figure 49.

The stratigraphy of the interior fill of the Galbreth structure can be seen in the profile of the east wall of Test Unit N35W23 shown in Figure 51. Below the humus and medium orange to yellow brown silty loam and rock fill (0-1.1 feet below surface, Levels I and II in Figure 51), a thin layer of coal ash and cinder was encountered over the entire unit. This layer of loose coal ash and cinder was encountered at 1.1-1.4 feet below surface, just below the top of Feature A-19, the dark asphalt/concrete foundation which was encountered at 0.9 feet below surface.

Beneath this cinder and ash layer was a thick horizon of medium to dark orange brown silty loam and rock fill (Level III, Figure 51). This layer was encountered from 1.4-2.4 feet below surface and was observed to be thicker in southern half of the unit. This fill is similar to, but significantly darker in color and more coarsely grained than, Level II. Underlying Level III was an uneven layer of medium orange brown coarse grained sandy loam. This layer, shown as Level IV in Figure 51, contained numerous pebbles, particularly when compared to Levels II and III. Beneath this was a thick and fairly uniform level of

FIGURE 51

Profile of the East Wall of Test Unit N35 W23, A. Chandler/Galbreth Site



160

Soil Key

Rocks

Feature A-19 Foundation wall

Dry cinder/ash/clinker level, part of level II

I – Humus

II – Medium orange to yellow brown silty loam and rockfill

III – Dark orange brown silty loam and rockfill. Browner than levels I or II, coarser sands than level II

IV – Medium orange brown sandy loam. Numerous pebbles, more than level I and II

V – Homogenous dark brown silt, bottom grades into level VI

VI – Mottled medium dark orange brown sands, some silt little clay. Similar to IV but with less pebbles/rocks

VIIa – Medium brown gravel/sands, more than levels IV and VI. Some small decayed schists/iron accretions along level's bottom

VIIb – Very compacted, variegated, iron-laden, red-ore/black/brown sands. Well concreted together, coarse grained

VIII – Orange-gray bright clays, some decayed schists

homogeneous, dark brown silt from 2.2-2.6 feet below surface. This level of dark silt is shown as Level V in Figure 51.

Underlying the dark brown silt of Level V was a thick layer of mottled medium dark orange-brown unconsolidated sands. This layer appears as Level VI in Figure 51. Beneath this level was a thick level of medium brown coarse and unconsolidated sands and gravel from 2.6-4.1 feet below surface. This level appears in Figure 51 as Level VII and contained the first noticeable amounts of broken rock and decayed schists since Levels II and III. Beginning at approximatley 4.3 feet below surface, numerous consolidated iron oxide-stained sand concretions were encountered within this level. This depth also marked the beginning of sterile soils in the unit.

At 4.8 feet below surface, these well developed sand concretions in Level VII formed a uniform and very firmly packed horizon across the entire unit. This "floor" is not cultural in origin, but represents a naturally occuring strata. Underlying this natural strata was a culturally sterile level from 4.9 feet below surface to the limit of excavation at 5.2 feet below surface. This deepest level was composed of bright and very moist gray and orange clays and contained numerous fragments of decayed schist. These orange and gray clays with numerous decayed schist fragments represented sterile soils in all of the project area and like Level VII represent the in situ weathering of local geologic strata.

Historic artifacts were recovered from every level of Test Unit N35W23 down to the sterile soils first encountered at 4.3 feet below surface in Level VII. Late nineteenth to early

twentieth century artifacts were found in every level including the deepest non-sterile level, Level VII. In this level, two small and relatively non-diagnostic whiteware body sherds were recovered. In the other levels of Test Unit N35W23, wire nails, window glass and other structurally-related artifacts comprised the majority of artifacts recovered. Of the total 152 historic artifacts recovered from this unit, 99 (65%) were structurally-related. Of the remaining artifacts, 46 (30%) were relatively non-diagnostic late nineteenth to early twentieth century redware, whiteware, and ironstone ceramic sherds. The remaining 5% of the artifacts recovered were .22 caliber shell casings (2), non-diagnostic bone (2), and three small oyster shell fragments.

The vertical distribution of artifacts was only slightly more diagnostic and suggests partial disturbance similar to that seen in structure 1. Most (75%) of the artifacts recovered from this unit were found in Levels IV and V, the medium brown sandy loam and dark brown silt levels from 1.6-3.0 feet below surface (Figure 51). Two recent twentieth century .22 caliber shell casings, however, were also found in this level and suggest at least partial disturbance. It is possible that Level V corresponds to the artifact bearing Level IV identified in along the southern east-west exterior foundation identified in Structure 1. The next largest concentration of artifacts (20%) was recovered from Level II, the first level of medium brown silty loam below the humus (Figure 51). The remaining 5% of the artifacts were recovered from Level VI and VII (Figure 51).

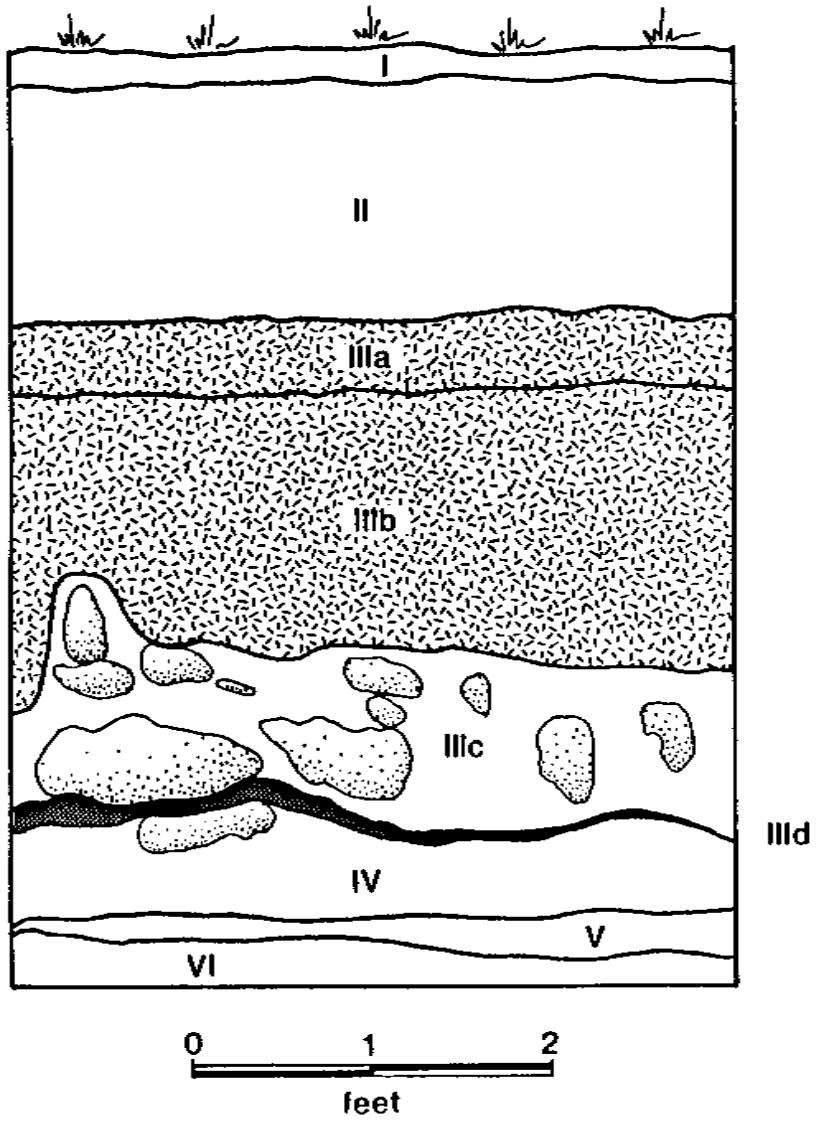
The construction of the north-south interior foundation in Test Unit N35W23 is shown in Figure 52. The foundation itself,

shown in Figure 52 as levels III A and B, extended from 1.5-3.3 feet below surface. A distinct poured lip separated portions III-A and III-B at approximately 1.9 feet below surface. Both III-A and III-B were of the same dark asphalt/concrete material identical to that seen in all of the other foundations of the structure located. Below the foundation was a layer of larger rock and loosely-packed medium brown sandy loam fill (Level III-C, Figure 52). This layer contained numerous roots and was probably laid as a base for the foundation. At the bottom of this layer, at approximately 4.2 feet below surface, a thin horizon of loosely-packed coal ash and cinders was encountered. This layer was also probably part of a base for the foundation. Underlying this layer of cinders and ash were two culturally sterile sand layers that extended to the limit of excavation at 5.2 feet below surface. These two levels are not fill, but undisturbed natural strata.

Test units were then extended to the south along the two exterior north-south foundations located thus far in Test Units N36W32-N33W32 and N39W23. Once more of each foundation was defined, additional test units were placed every five feet along the foundations and excavated to a depth sufficient to determine their preservation, check for a builder's trench, and locate any interior walls. Although no intact trash deposits, builder's trench or other features were located in these test units, one reconstructable large glass storage vessel was recovered from just below the humus in Test Unit N30W33. This vessel is shown in Plate 14.

FIGURE 52

Profile of the West Wall of Test Unit N35 W23, A. Chandler/Galbreth Site

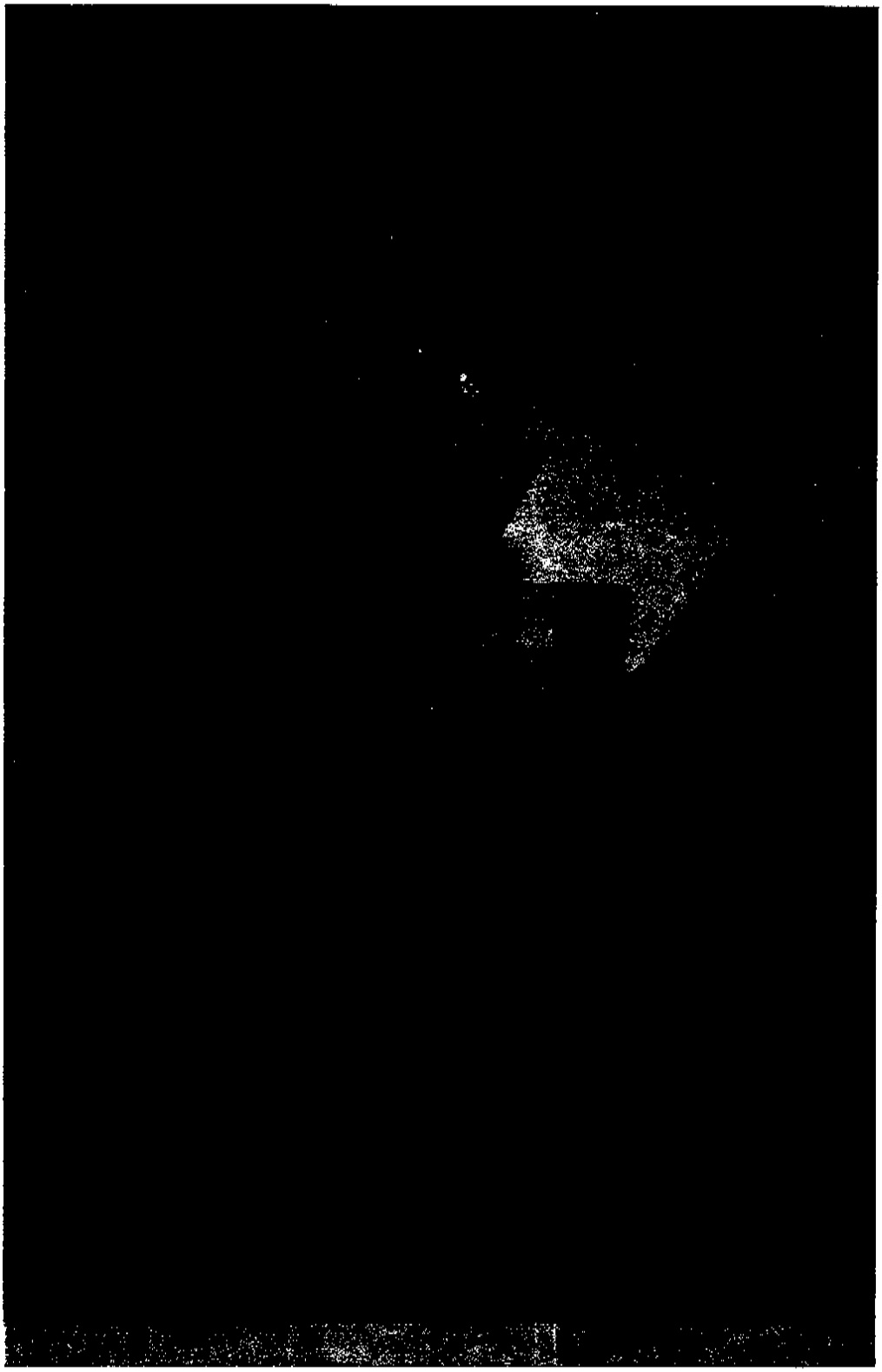


Soil Key

- Rock
- Asphalt/concrete foundation
- Loosely packed coal, cinder and ash
- I Humus
- II Medium orange-brown silty loam with some orange-brown silty clay pockets
- IIIa Top slab of poured asphalt/concrete interior foundation. Disturbed upper portions
- IIIb Very coarse and pocketed grey-black asphalt/cinder cement
- IIIc Drylaid course of large flat, undressed rock and smaller rock fill. Little soil, but numerous roots in rock intersices
- IIId Thin layer of loosely packed coal ash and cinders
- IV Sterile coarse grey brown sand with darker black-brown sand mottlings. Abundant orange-brown iron stains and mica flecks
- V Very hard packed dark red-orange-brown and black coarse sands. Sterile and with numerous iron concretions and fragments of decayed schist
- VI Bright orange yellow clay with numerous decayed schists and large iron oxide concretions

PLATE 14

Reconstructed Glass Storage Vessel from Levels I and II, Feature A-19, A. Chandler/Galbreth Site



With the two northern corners of the Galbreth structure exposed, it was decided to attempt to find the southwest corner by excavating a series of test units along the western and southern foundations of the structure linking up with the southern east-west foundation located in the Phase I Test Unit S3W28. A total of 11 additional test units were excavated along this western north-south foundation. These units were placed approximately five feet apart along the foundation. Once the foundation was uncovered and determined to be intact, the area along either side of the feature was carefully troweled to test for a builder's trench, interior walls, trash deposits, and other features. Once this was complete, the area between the test units were excavated and the process repeated. As the units and test trenches excavated along Feature A-19 were excavated only to define the limits of the structure and to locate features, the humus and first level of fill above the foundation were not screened and no artifacts recovered. Historic artifacts in closer association with the foundation, however, were recovered and provenience data recorded. One partially intact refined redware bowl was recovered, however, from the two uppermost levels of fill in Test Unit N10W24. This vessel appears in Plate 15.

The foundation of the Galbreth structure within these 11 additional test units and test trenches is shown in Figure 53. Only one feature was encountered in these units. No evidence of a builder's trench or other features was located. This single feature was a large, approximately 6.5 feet long and 1.5 feet wide crude fieldstone and mortar projection first located by Test

PLATE 15

Reconstructed Redware Bowl from Levels I and II, N10 W24, A. Chandler/Galbreth Site

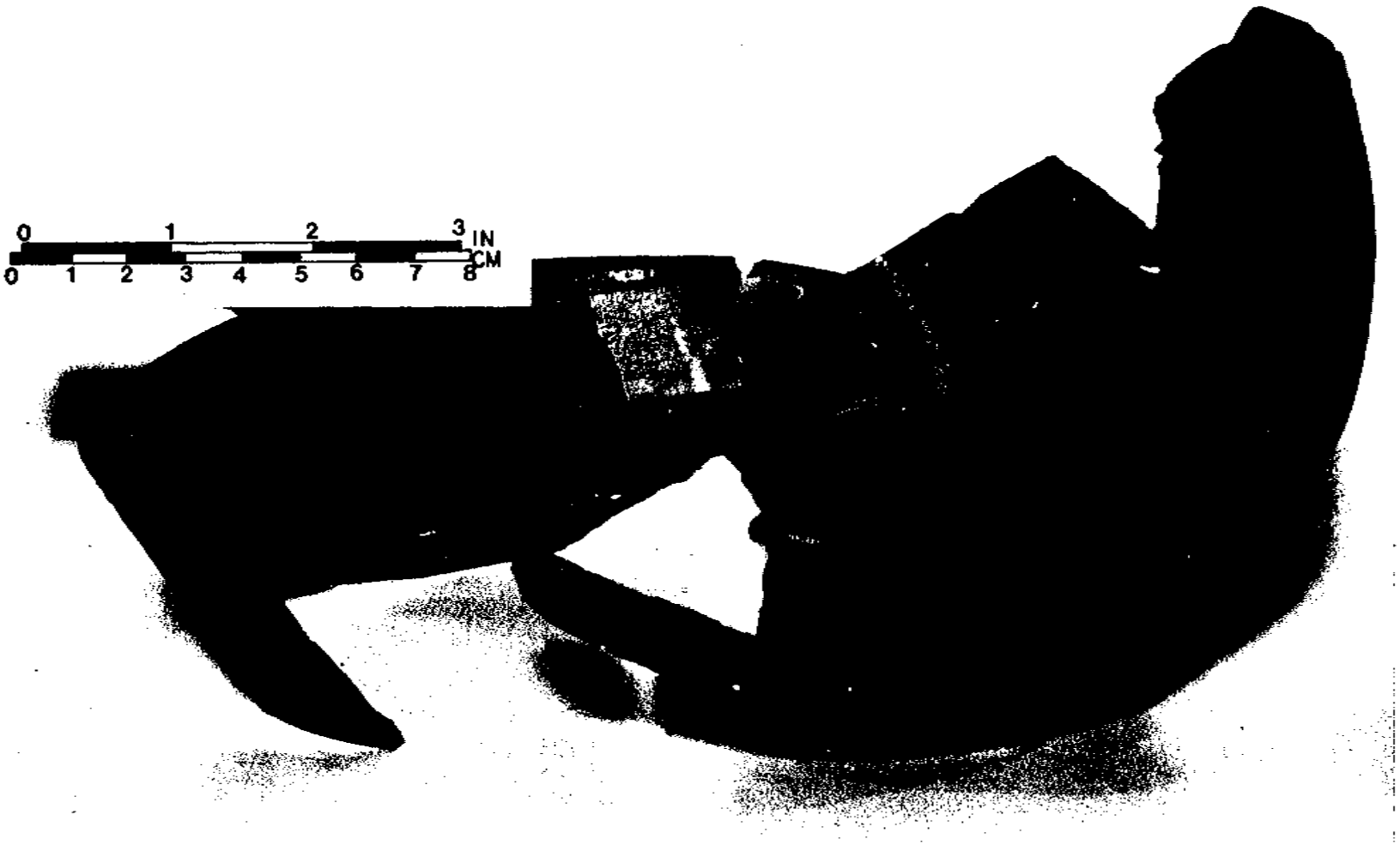
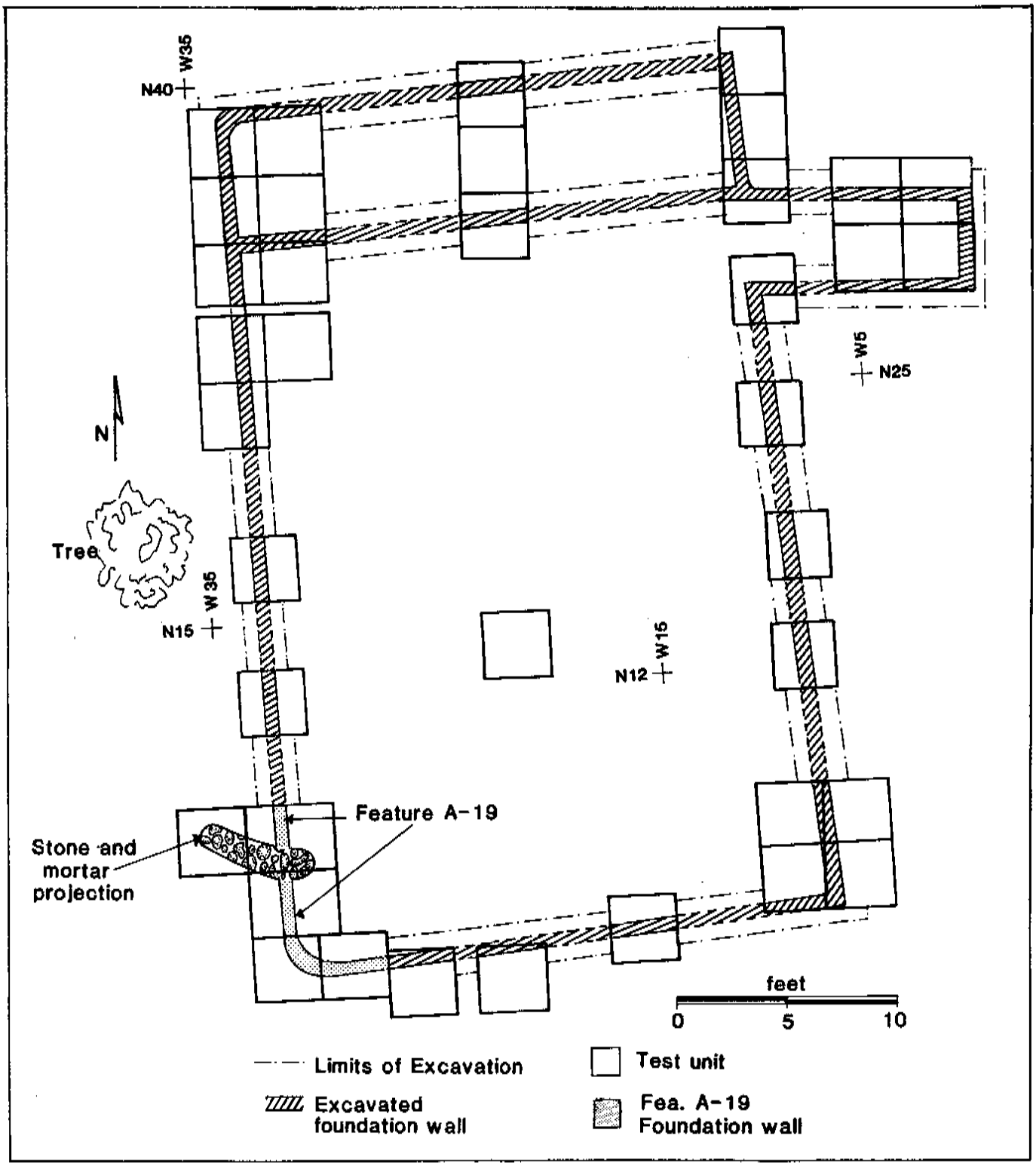


FIGURE 53

Component 2 (Galbreth House) of the A. Chandler/Galbreth Site (N-10955, 7NC-B-19) as Determined by Phase I and II Testing



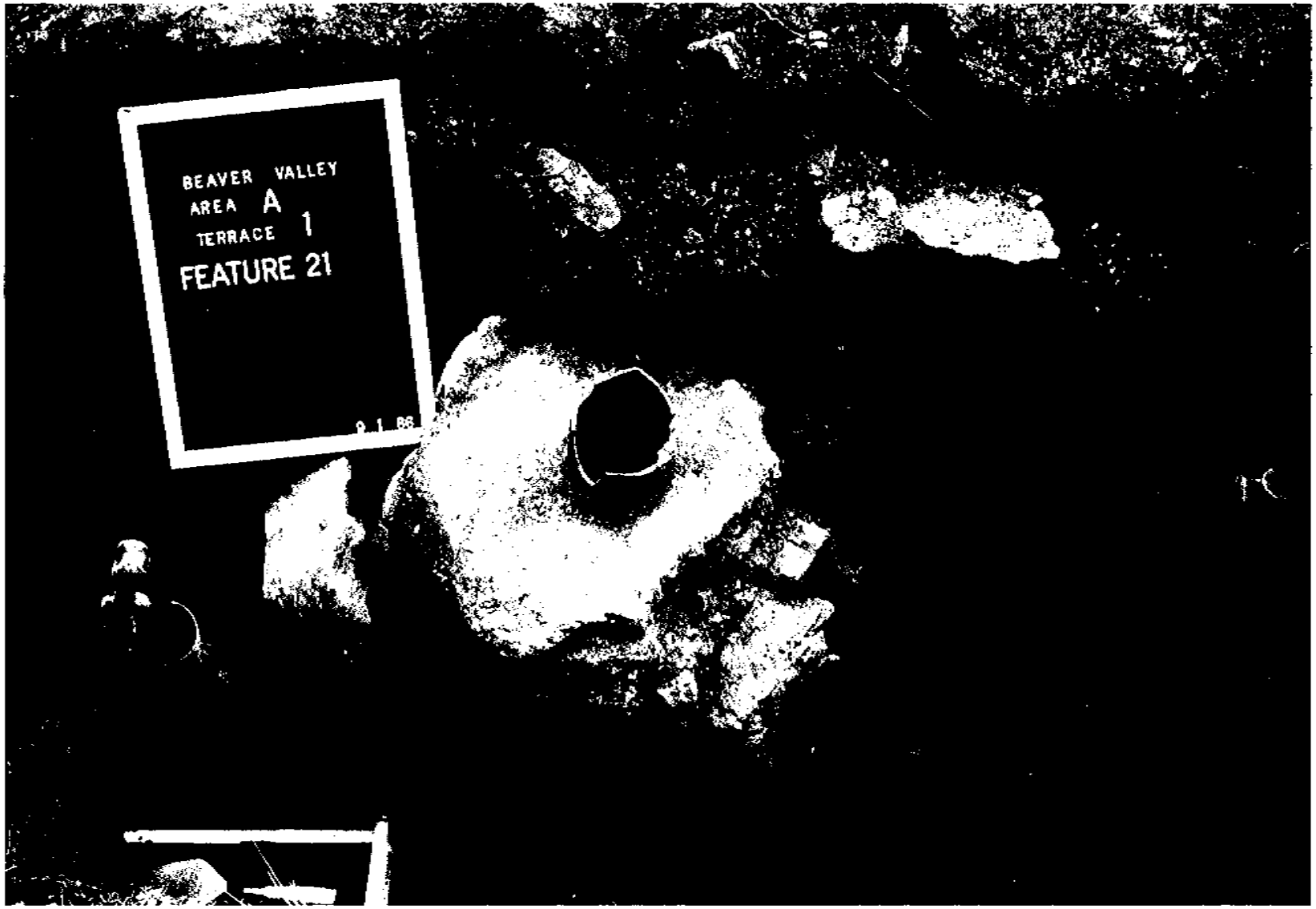
Unit N4W34. This projection was encountered at 1.2 feet below surface and was observed to bisect the east wall of Feature A-19 along a roughly perpendicular angle. The intersection of the eastern foundation of Feature A-19 and this projection is shown in Figure 53. This crude and partially disturbed projection was found to be only 2 courses of stone thick (approximately 0.5 feet) and appeared to be contemporary with the eastern foundation. Upon further excavation, no underlying cinder, sand,or gravel base was found. The construction of this projection was much different, particularly in the mortar used, than the stone and mortar foundations found in Structure 1. Given the location of the projection, its orientation to the structure, and its crude construction, it is likely that it relates to some type of drain and gutter system. This is supported by the large number of commercial terra cotta drain tile fragments found along it.

With the western exterior wall completely exposed and the southern east-west foundation exposed to Unit S3W28, it was decided to continue excavation in the same manner to locate the remaining southeast corner and to expose portions of the eastern north-south foundation. A total of 10 test units were excavated along these two foundations. These test units and the foundations as located within them are shown in Figure 53.

Two features were identified in this series of test units and test trenches. The first feature was an early twentieth century pump and pipe assembly along the southeastern corner of the structure. This assembly was labelled Feature A-21 and appears in Plate 16. Feature A-21 consists of a large 3 inch

PLATE 16

Feature A-21, Galbreth House
(Component 2, A. Chandler/Galbreth Site)



diameter iron pipe set into concrete and related to but not connected to a small, partially disassembled mechanical pump. A 1 inch iron pipe extended from the base of the pump into the interior of the structure. The large iron pipe and concrete abutted the foundation, and with the pump, appear to be contemporary with it. The function of this pump is not known, but the large pipe in concrete probably relates to a gutter and drain system. A small 1/2 inch diameter iron pipe along the side of the large pipe and concrete assembly, on the same side as the pump, may once have connected the two. Another 1/2 inch diameter iron pipe extended from the south wall of Test Unit N1W8 at approximately the same depth as the pump and may have also once been connected to the pump.

The second feature located by these test units was a set of poured concrete stairs near the northeastern corner of the structure. This feature was first encountered in Test Unit N28W12 and was labelled Feature A-23. These steps appear in Plate 17. These stairs were then completely uncovered and two test units, N30.5W6 and N31W12, excavated to determine the sequence of fill within this part of the site and details of the construction of the stairs and adjacent portion of the asphalt/concrete foundation.

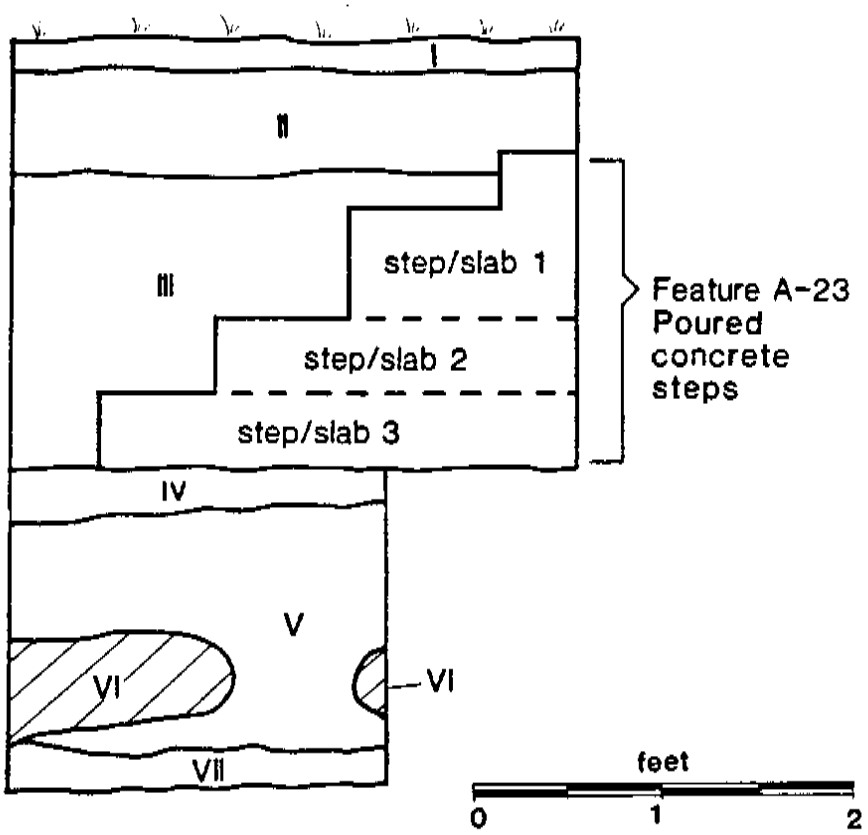
Feature A-23 consisted of three poured concrete steps. These steps consisted of three 0.8 foot thick concrete slabs cemented together lengthwise. A profile of the north wall of Test Unit N30.5W6 showing the construction of the stairs and the statigraphy associated with Feature A-23 is given in Figure 54. Above the steps, three layers of twentieth century fill,

PLATE 17

Feature A-23, Galbreth House
(Component 2, A. Chandler/Galbreth Site)

FIGURE 54

Profile of the North Wall of Test Unit N30.5 W6, A. Chandler /Galbreth Site



Soil Key

I–Humus

II–Yellow clay cap

III–Medium brown sandy loam and large rock fill

IV–Dark gravels, cinders, and sand

V–Sterile, mottled orange–red–brown clayey loam. Abundant decomposed schist fragments

VI–Dark brown sandy loam pockets. Very coarse sand and sterile

VII–Gray–brown–bright–orange clays. Numerous decomposed schist fragments. Sterile

including a thin humus, were located. Beneath the humus, a thick yellow clay cap across the entire unit was encountered from approximately 0.2-0.7 foot below surface. Beneath this cap was a thick layer of medium brown sandy loam and rock fill from approximately 0.7-2.4 feet below surface. This layer of fill appears as Level III in Figure 54 and contained numerous twentieth century artifacts including crushed paint cans, intact bottles of turpentine, mason jar fragments, radio tubes, and electrical wires and insulators. Numerous non-diagnostic structurally-related artifacts were also recovered. This fill level extended to the foot of the third step. At the base of the step, a sterile orange to red-brown clay loam was encountered (Level V, Figure 54). Beneath the step, however, a different sterile soil was encountered. This sterile soil was composed of a thin, layer of dark gravel, sand, and cinders and was probably laid as a base for the steps (Level IV, Figure 54).

Beneath this layer of gravel and sand was a sterile orange to red-brown clay loam (Level V, Figure 54). This level of clay loam was found to extend to 3.8 feet below surface and contained two small pockets of a slightly different sterile soil. These two pockets appear as Level VI in Figure 54 and were composed of a dark brown, coarse-grained sandy loam.

One additional sterile strata was then encountered from 3.6 feet below surface to 4.0 feet, the limit of excavation. All of these sterile levels found in N30.5W6 represent various undisturbed naturally occuring clay loam and clay strata. Numerous fragments of decomposed schist were found in all of the three sterile levels, but as with the clay content of the Levels

V-VI, tended to increase in abundance with depth.

No evidence of an intact floor to the second structure was found in this or any other test unit excavated. The level of twentieth century fill and large rocks was found to lie directly on sterile soil. Very few historic ceramics were recovered from this level of fill -- the only historic artifacts recovered were a few relatively non-diagnostic late nineteenth to early twentieth century whiteware body sherds.

Thus far, three distinct rooms and one set of stairs had been exposed by Phase I and II excavations in the Galbreth structure. All of this structure as exposed by test units and trenching is shown in Figure 53. Levels of early twentieth century fill were found within every area along the exterior of the structure. Evidence of partial stratigraphic disturbance outside of the structure probably relating to the destruction of the building was located along all of the major foundations. No intact trash deposits or other non-structural features were encountered.

One additional 3 X 3 ft test unit was then excavated in the Galbreth structure to test for intact features and historic artifacts from non-disturbed contexts. This unit, N12W23, was placed in the center of the largest room of the structure. This unit is located in Figure 53.

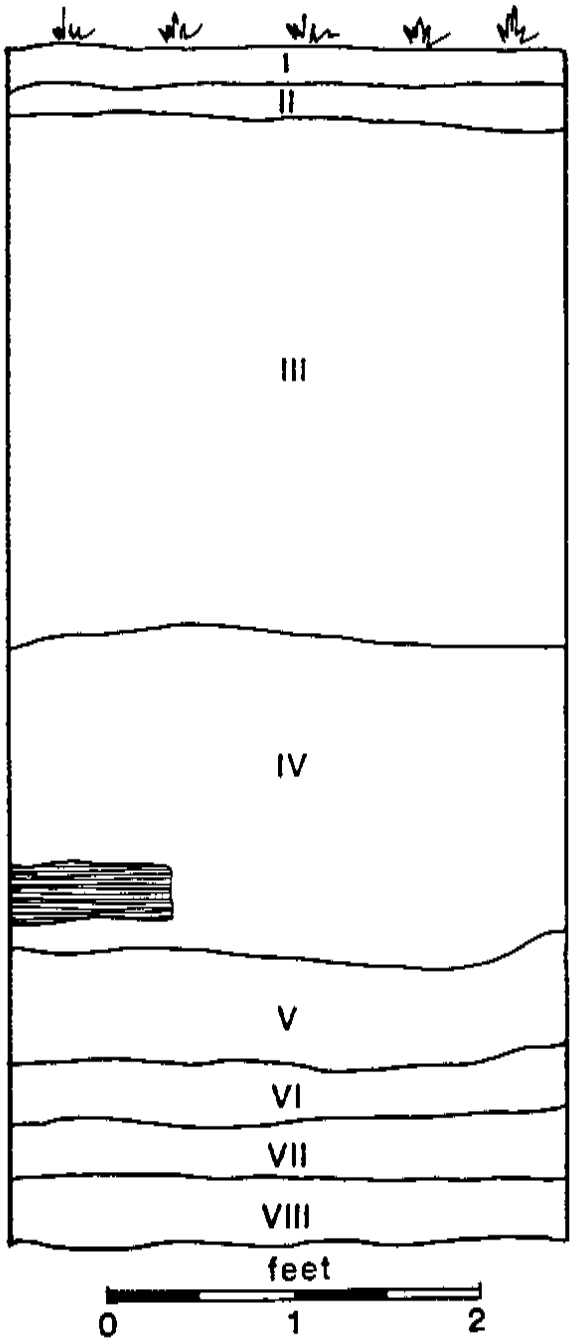
Test Unit N12W23 was excavated to a final depth of 6.4 feet below surface. No features or intact deposits were located. The stratigraphy of the interior of this part of the Galbreth structure can be seen in the profile of the east wall of this

unit shown in Figure 55. Beneath the humus, three primary levels of recent historic fill were located. The first fill layer was found from 0.2-0.4 feet below surface and was composed of a culturally sterile medium brown sandy clay with abundant gravels (Level II, Figure 55). Underlying this from 0.4-3.2 feet below surface was a thick layer of medium orange-brown coarse sand and abundant large rock fill (Level III, Figure 55). This level of fill is similar to that seen at this depth in other areas of the Galbreth structure. This level contained relatively few historic artifacts (65 total), most of which (94%) were relatively non-diagnostic structurally-related artifacts: wire nails and nail fragments and window glass, brick, and non-diagnostic wood fragments. The other 6% of the artifacts recovered from this level was composed of three non-diagnostic whiteware body sherds and one small body fragment of a yellowware vessel.

The third major level of historic fill was a thick layer of loosely-packed medium to dark brown clayey silt encountered from 3.2-4.9 feet below surface. This level contained numerous large rocks and appears in Figure 55 as Level IV. A large fragment of a cut timber was located towards the bottom of the level at approximatley 4.3 feet below surface. Historic artifacts recovered from this level were similar in type and relative density to the fill level above it. Below the cut timber, an intact early twentieth century mason jar was recovered. Relatively non-diagnostic structurally-related artifacts comprised almost all of the historic artifacts recovered although six pieces of whiteware and three of ironstone were also found. One of the whiteware fragments was decorated with a blue-green

FIGURE 55

Profiles of the East Wall of Test Unit N12 W23, A. Chandler/Galbreth Site



Soil Key

I Humus

II Medium brown sandy clay with gravel and some small to medium rocks

III Fill, orange-brown coarse sand with some clay. Numerous medium to large rocks, some hollow pockets

IV Fill, medium to dark brown clayey silt with numerous large rocks, looser, with more hollow pockets

V Medium brown-grey fine grained sandy silt with pockets of pure sand (micaceous)

VI Medium brown-orange silty loam

VII Dark brown organic silt, some pockets of grey silt

VIII Medium brown clayey sand and gravel, gravels decomposing schist

Cut timber

transfer print and a partially molded leaf pattern. Another of the whiteware fragments was decorated with an unidentified blue hand-painted pattern. Decorations such as these were in common use in the late nineteeth century, but may date as early as the mid-nineteeth century. All of the other historic ceramics were small, relatively non-diagnostic undecorated body sherds.

The next deepest strata encountered in Test Unit N12W23 was a layer of medium brown fine-grained sandy silt with pockets of gray micaceous sands from 4.7-5.4 feet below surface. This fill layer contained only two heavily corroded nail fragments and no other diagnostic artifacts and appears in Figure 55 as Level V. Beneath this level of brown sandy silt, two sterile levels of silt and silt loam were encountered from 5.7-6.0 feet below surface. These two levels appear as Levels VI and VII in Figure 55. No cultural floor was identified in Test Unit N12W23.

This test unit completed Phase II test excavations within the Galbreth structure. No intact non-structural features had been located and the foundations of almost the entire structure had been exposed. Phase II operations were then shifted to south of the Galbreth and Chandler structures to sample the yard areas of the two structures further south in terraces 2 and 3. Two additional grids of shovel tests were excavated in terraces 2 and 3 to expand the shovel test grids excavated during the Phase I Survey. Atotal of 14 shovel tests were excavated in terrace 2 immediately south of the two structures along the same grid system used for the Phase I shovel tests. In terrace 3, a total of 22 additional shovel tests were excavated. The location of

these additional shovel tests and the original Phase I tests in terraces 2 and 3 and the total historic artifacts in each are shown in Figure 56.

The stratigraphy of terraces 2 and 3 identifed during the Phase II Survey was identical to that determined by the Phase I Survey in Shovel Test A-8 in terrace 2 (Figure 17) and Shovel Test A-15 in terrace 3 (Figure 22). The stratigraphy consisted of a humus underlain by a medium gray to brown silty loam from approximately 0.25-1.5 feet below surface and a yellow brown silty-sandy clay loam from approximately 1.5 to 2.0 feet below surface. Sand content tended to increase with depth and sterile soils with numerous decomposed schists were usually first encountered at approximately 1.8-2.0 feet below surface.

Historic artifacts were recovered from every one of the Phase II shovel tests excavated in terraces 2 and 3. No features or concentrations of artifacts, however, were located. In general, historic artifacts were evenly distributed within and between each terrace as can be seen in Figure 56, which shows the total number of historic artifacts recovered from each of the Phase I and Phase II shovel tests in terraces 2 and 3. Figure 57 shows the distribution of structurally-related artifacts within these excavations in terraces 2 and 3. The distribution of whiteware and ironstone, pearlware, and redware fragments are given in Figures 58, 59, and 60, respectively. As with the total number of historic artifacts and structurally-related artifacts, the distribution of specific ceramic types within terraces 2 and 3 indicated no diagnostic activity areas or additional features.

FIGURE 56

Location and Total Number of Historic Artifacts by Phase I and II Shovel Testing in Terraces 2 and 3, A. Chandler/Galbreth Site

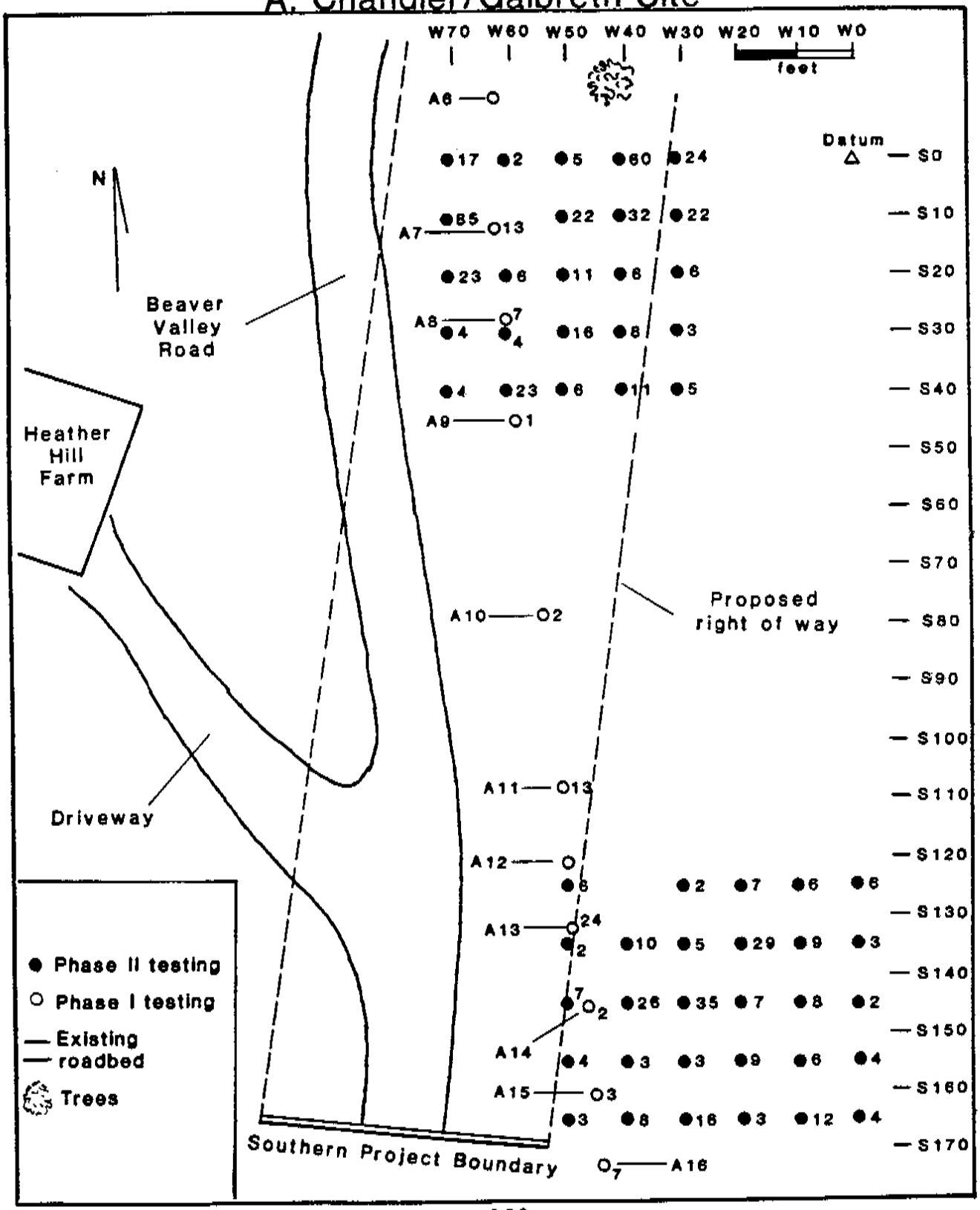


FIGURE 57

Total Structurally-Related Artifacts by Phase I and II Shovel Testing in Terraces 2 and 3, A. Chandler/Galbreth Site

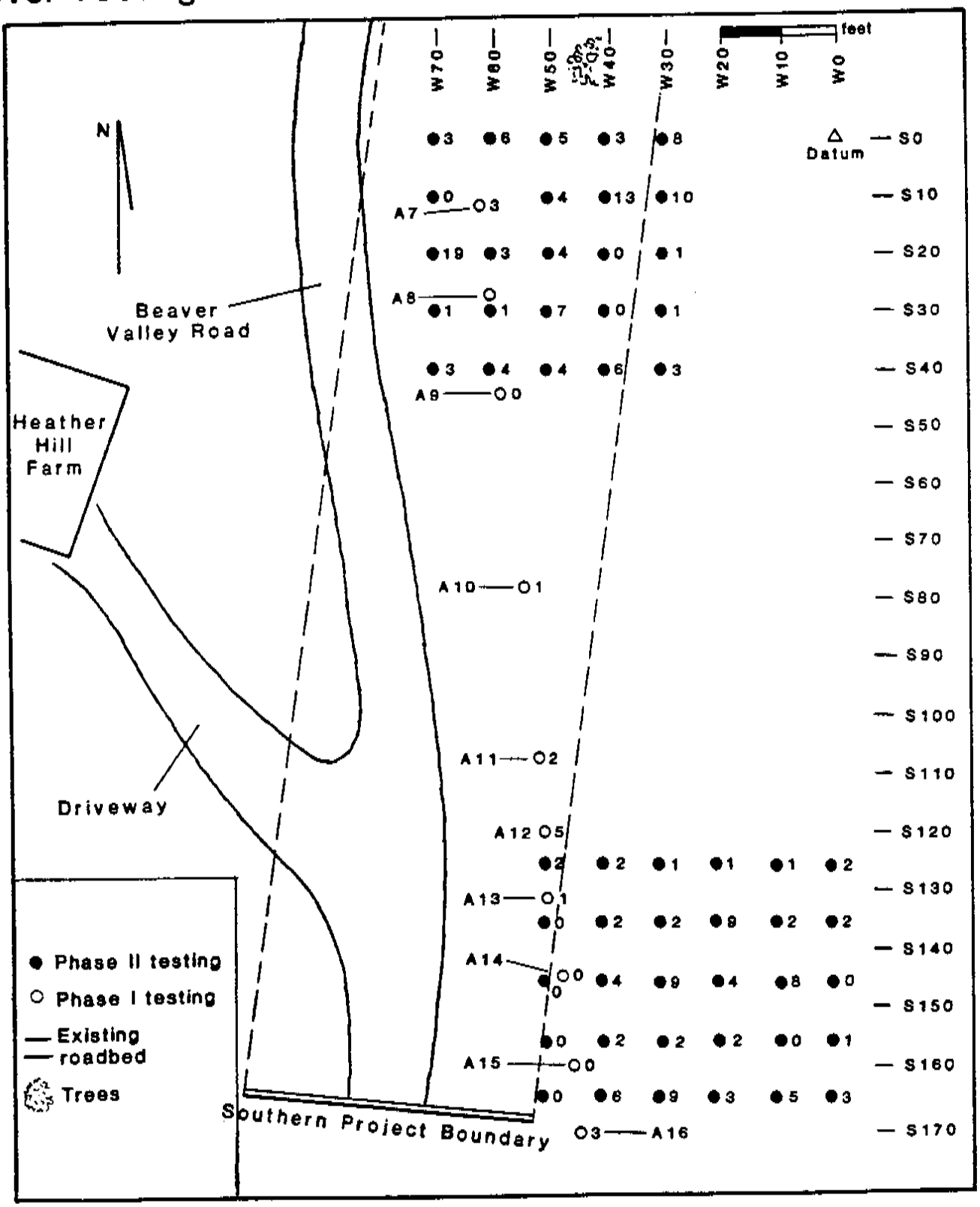


FIGURE 58

Total Whiteware and Ironstone Artifacts by Phase I and II Shovel Testing in Terraces 2 and 3, A. Chandler/Galbreth Site

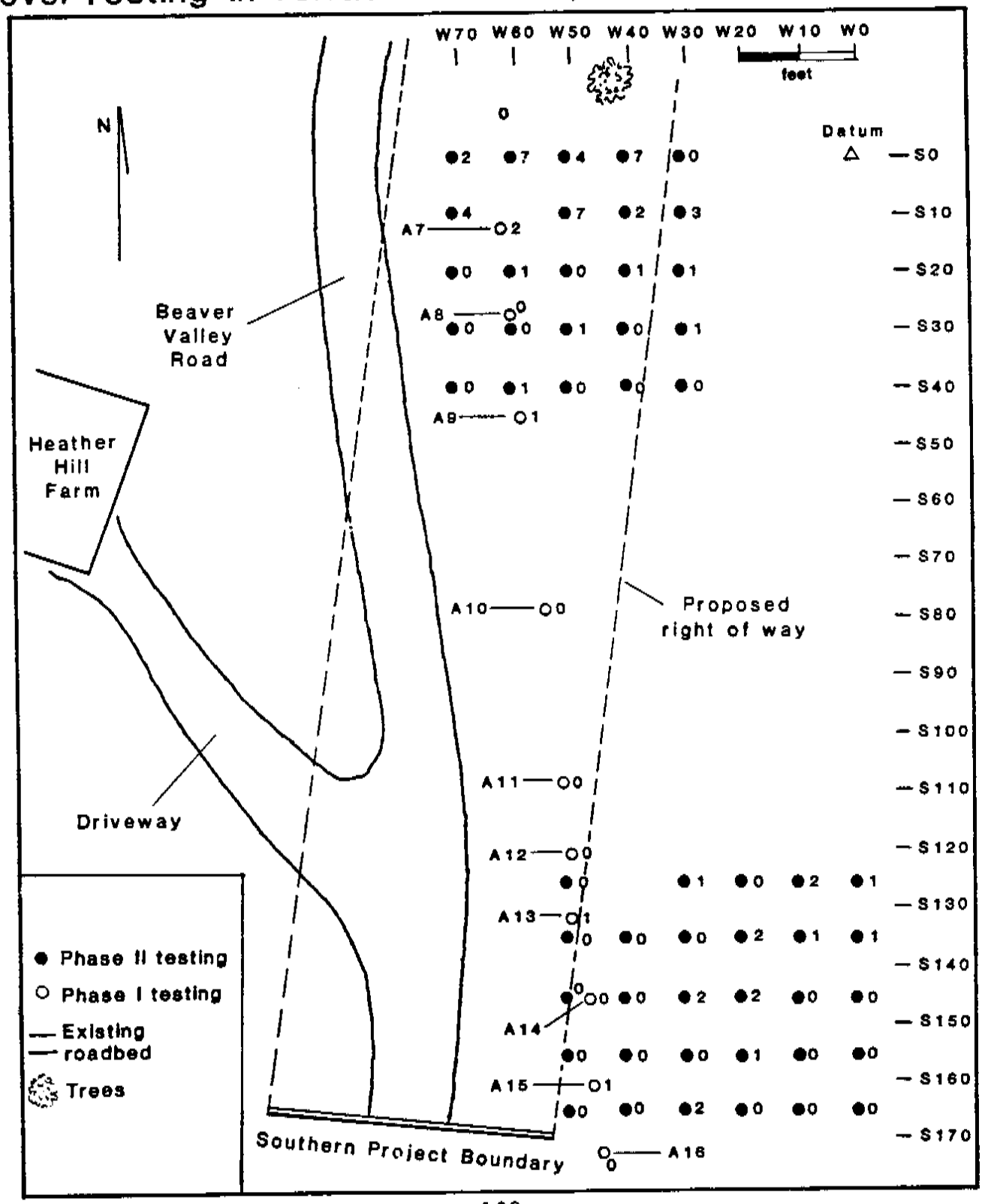


FIGURE 59

Total Pearlware and Ironstone Artifacts by Phase I and II Shovel Testing in Terraces 2 and 3, A.Chandler/Galbreth Site

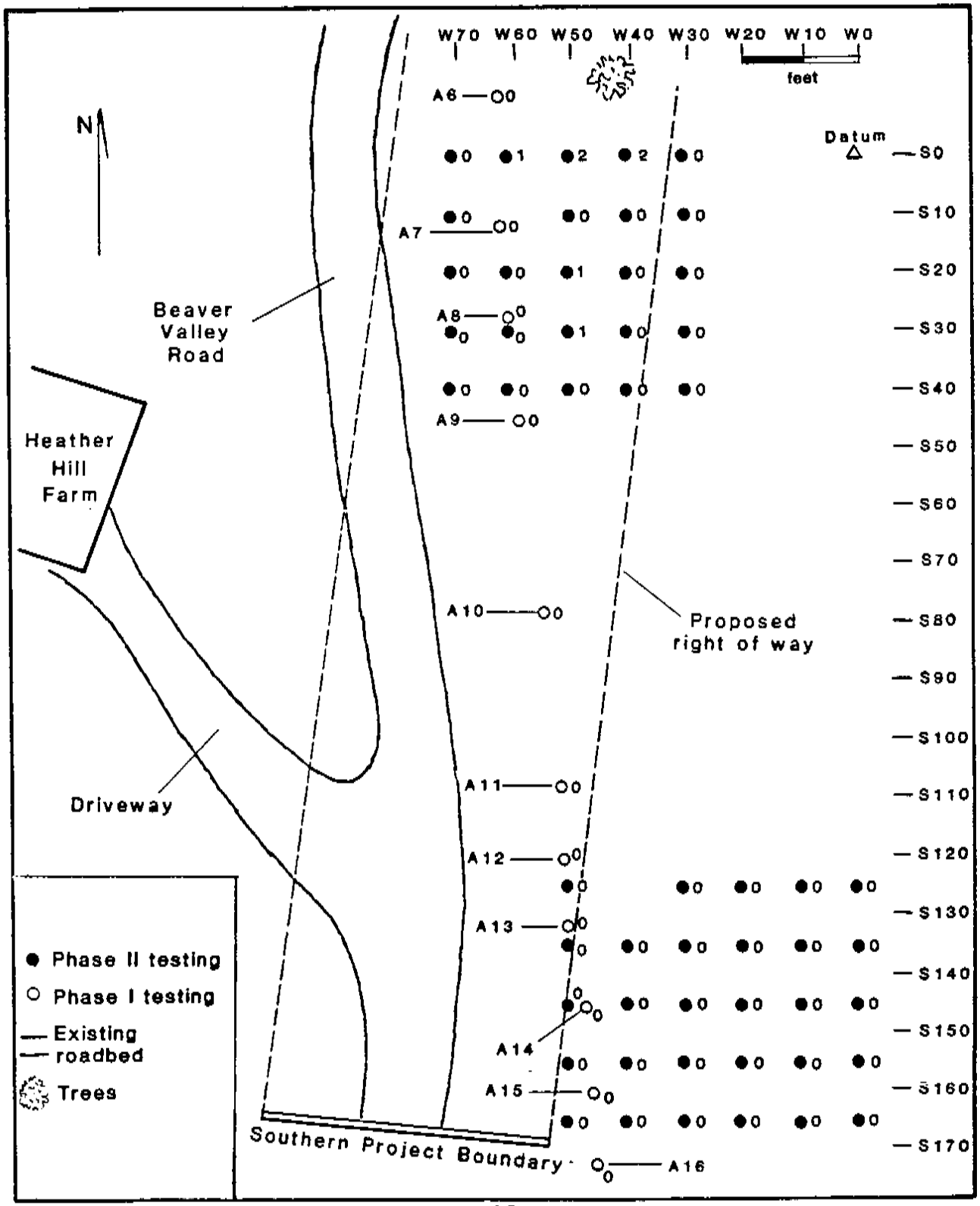
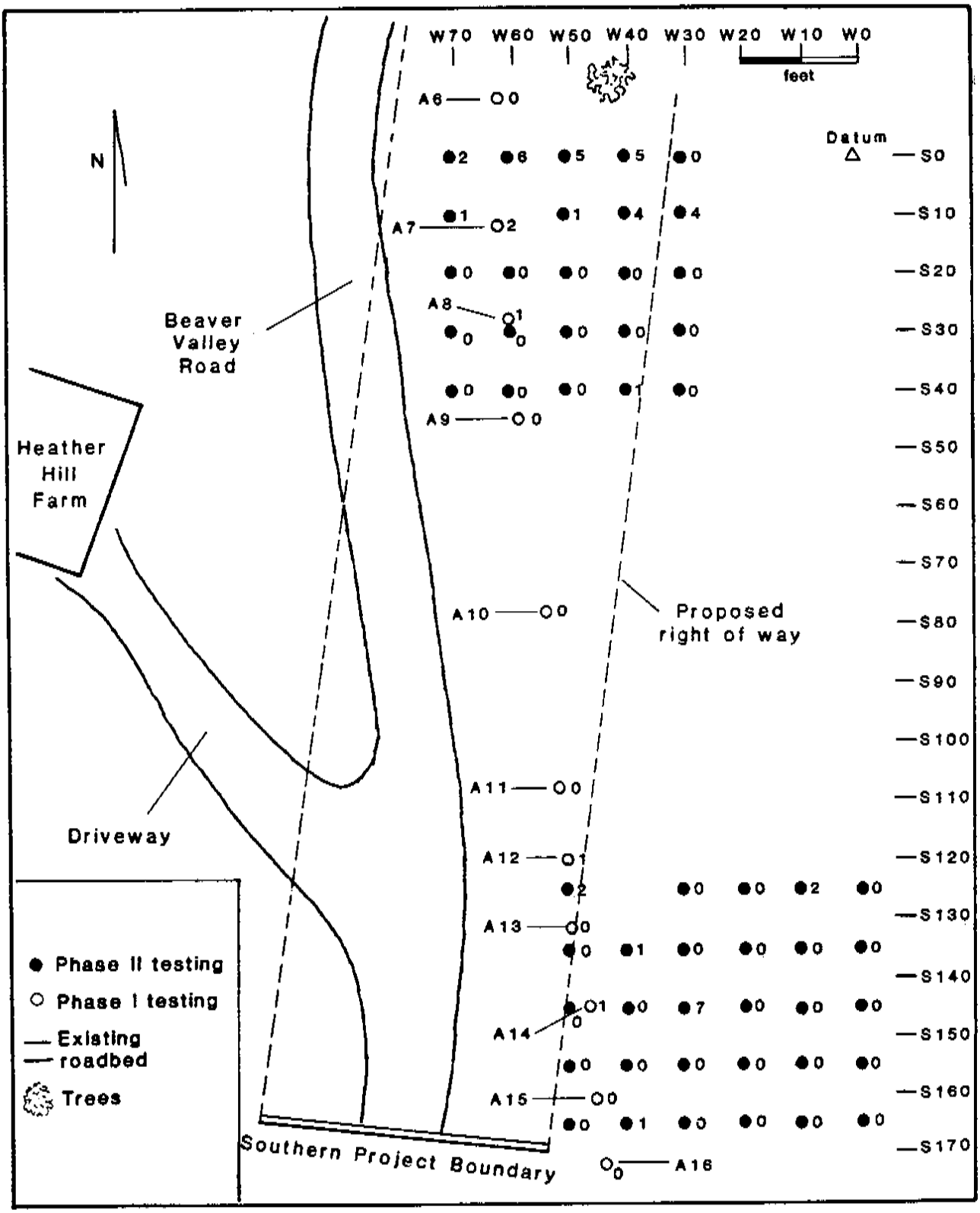


FIGURE 60

Total Redware and Ironstone Artifacts by Phase I and II Shovel Testing in Terraces 2 and 3. A.Chandler/Galbreth Site



The excavation of these additional shovel tests in terraces 2 and 3 completed the Phase II Survey of the A. Chandler/Galbreth site. Both of the major components of the site were determined not to be eligible for nomination to the National Register of Historic Places under any criteria. Evidence of stratigraphic disturbance was seen in the deepest cultural levels of both the A. Chandler and Galbreth components. No activity related features or other non-structural deposits of artifacts were located in either component. No builder's trench or other sealed deposits were located. No evidence of a privy was located by testing or background research, including informants. In addition, both of the components of the site were small in size and the majority of each were excavated during the Phase II survey. Given these factors, no further work is recommended.

CHANDLER/HIGHFIELD BLACKSMITH SHOP (N-569.1, 7NC-B-18) (Area C) (Figure 61)

The J. Chandler/Highfield Blacksmith Shop site is located along the west side of Beaver Valley Road south of Beaver Creek. The proposed ROW extends along Beaver Valley Road approximately 25 feet west of the present road and includes about 1/4 of the site. This site consists of one component--the yard and attached stable area of a small blacksmith shop associated with N-569, a late eighteenth to early nineteenth century stone dwelling approximately 600 feet northwest of the blacksmith site limit (Plate 8). The blacksmith shop was built in the early nineteenth century by Jehu Chandler and operated, at least intermittantly, until 1926.

The limits of the J. Chandler/Highfield Blacksmith Shop site (N-569.1, 7NC-B-18) as indicated by the Phase I and II surveys are shown in Figure 61. The proposed ROW is also shown in this figure. The northern limit of the site is approximately 80 feet south of Beaver Creek and the southern limit is a woodline and ephemeral creek 120 feet south of the northern limit. The eastern limit of the site is Beaver Valley Road. The western limit of the site is approximately 80 feet west of Beaver Valley Road and 55 feet west of the proposed ROW. These limits are based on the distribution of structurally-related and other artifacts within the original series of tests excavated by the Phase I Survey and the more extensive tests and background research completed during the Phase II Survey. The northern, southern, and eastern limits of the site also correspond to the limits of the J. Chandler/Highfield property as established by deed research. Summaries of the deed transactions for the J. Chandler/Highfield site are given in Tables 4, 9, and 10.

The J. Chandler/Highfield property was part of the same Rockland Manor parcel purchased by William Hicklen in 1722 (NCD G-1-337, 338). The history of this property and its occupation is the same until 1812 as that given previously for the A. Chandler/Galbreth site. A summary of all the deed transactions from 1699-1812 is given in Table 4.

In 1812, in the last year of his life, Amor Chandler (Sr.) sold two parcels of land containing a total of approximately 7 1/2 acres of land along the west side of Beaver Valley Road and south of Beaver Valley Creek. The largest of the parcels, containing 6 1/4 acres, was the site of the blacksmith shop. The

FIGURE 61

Limits of the J. Chandler/Highfield Blacksmith Shop (N-569.1, 7NC-B-18)

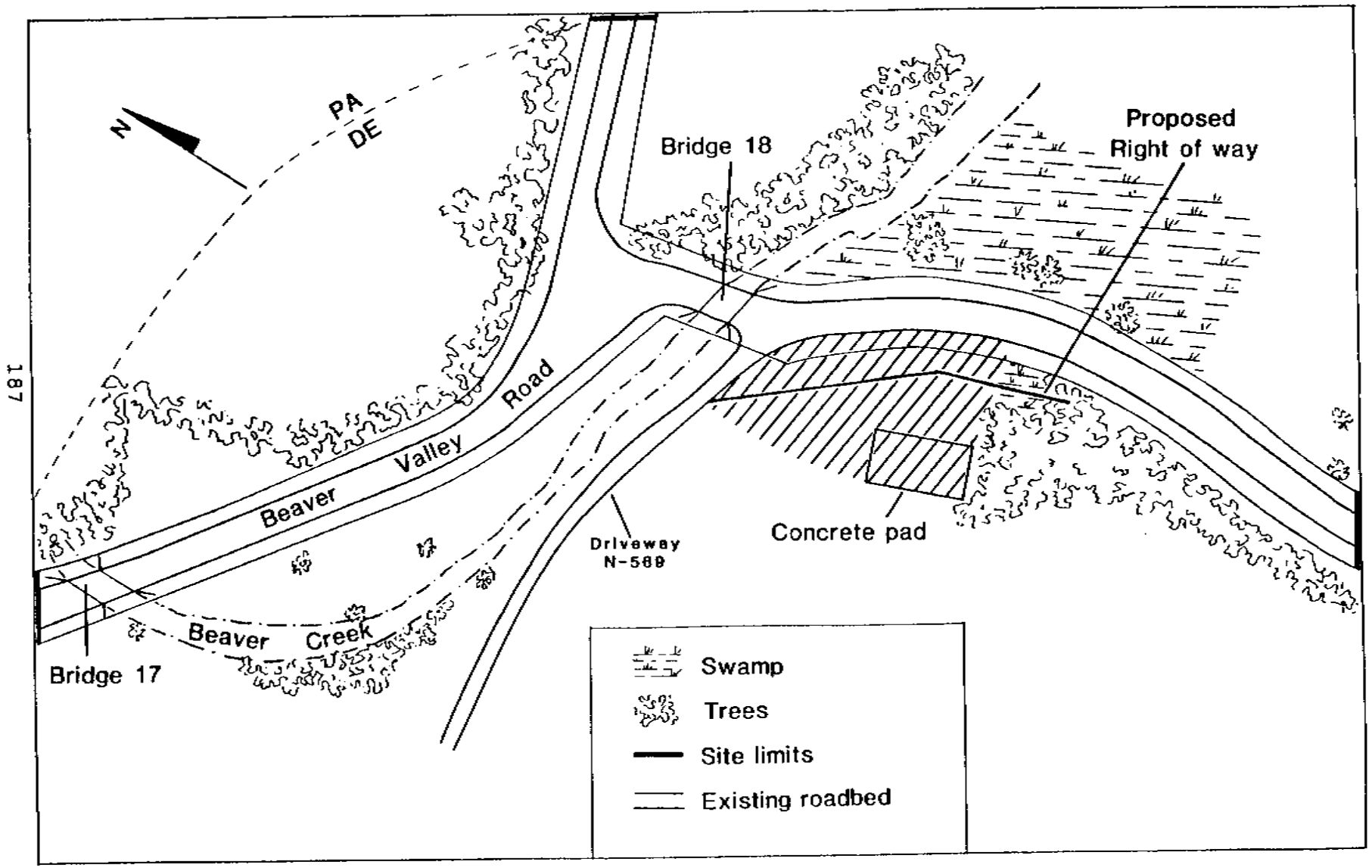


TABLE 9

SUMMARY OF DEED TRANSACTIONS FOR THE J. CHANDLER/HIGHFIELD PROPERTY, 1812-1888

Transaction	Date	Deed Reference
Amor Chandler (Sr.) and wife Elizabeth to his son Jehu Amor, Rachel, Mary, Elizabeth and Abigail	10 Feb. 1812	(NCD A-5-147)
Jehu Chandler and wife Lydia to son John Chandler	20 Dec. 1837	NCD A-5-147
John Chandler and wife Elizabeth to brother Jehu Chandler (II)	22 March 1845	(NCD L-6-215)
Jehu Chandler (II) and wife Abigail to James H. Fields	28 March 1848	NCD L-6-215
James H. Fields to Chalkly Hatton	25 March 1853	NCD B-7-303
Chalkly Hatton to John Chandler	29 March 1853	NCD C-7-86
Mary E. Pyle and William T. Chandler and wife Mary to Amor H. Chandler (2/3 interest)	2 Nov. 1882	NCD W-12-379
John Chandler to Amor H. Chandler (1/3 interest)	7 August 1880	NCC Will G-2-78 and Intestate Laws of De.
Amor H. Chandler to William S. Stokes	13 August 1888	NCD G-14-383

TABLE 10

SUMMARY OF DEED TRANSACTIONS FOR THE J. CHANDLER/HIGHFIELD PROPERTY, 1888-PRESENT

Transaction	Date	Deed Reference
Amor H. Chandler to William S. Stokes	13 August 1888	NCD G-14-383
William Stokes to Lewis F. Adair	1 May 1889	NCD R-14-195
Lewis Adair to Elizabeth Highfield	1 August 1889	NCD T-14-268
Elizabeth Highfield to her children Eva Moore, William J. and John G. Highfield	4 April 1926	NCC Will A-5-434
John G. Highfield Jr. and wife Alice to son William J. Highfield (1/4 interest)	24 December 1926	NCD R-34-329
William S. Potter, Trustee of Elizabeth Highfield to Paul Leahy	4 June 1930	NCD C-37-395
Paul Leahy to John G. Highfield, Jr.	5 June 1930	NCD A-37-392
John G. Highfield, Jr. to his wife Alice G. Highfield	30 Dec. 1938	NCC Will
Alice G. Highfield to the City of Wilmington and Woodlawn Trustees	8 March 1939	NCD F-41-490

aseries of property interest transfers between Jehu, Amor, Rachel and the other heirs of Amor Chandler from his death in 1813 to Rachel's death in 1838 did not affect the blacksmith shop property.

The first reference to a blacksmith shop on the J. Chandler/Highfield property is a 1816 tax assessment for

Brandywine Hundred. At this time Jehu Chandler was assessed for 8 acres of improved land, one "small" stone dwelling, a smith shop, and a small frame barn, all worth $1,000. Jehu Chandler, a blacksmith, also farmed and was assessed for $56 worth of livestock. In comparison, Jehu's brother Amor who was living across the road and farming full time, was assessed for livestock valued at $254.

In 1837 Jehu Chandler's stone house, frame stable, and smith shop, and 7 1/2 acres of improved land were valued at $375. The "stone house" is probably N-569. In this same year, Jehu and his wife Lydia sold the house, blacksmith shop, and outbuildings to their son John Chandler for $1160 (NCD A-5-147, Table 9). John Chandler is listed in this transaction as a blacksmith and probably operated the shop after this. His father Jehu died in 1842.

John Chandler and his wife Elizabeth owned the blacksmith shop until 1845, when they sold both parcels to John's brother Jehu Chandler (II) and his wife Abigail. A summary of the geneology of the Chandler family during this period is given in Appendix III.

In 1848 Jehu Chandler (II) sold the house, blacksmith shop and all of the property to James H. Fields for $1700 (NCD L-6-215, Table 9). James H. Fields lived in Delaware County, Pennsylvania and did not live in the Beaver Valley area according to the 1850 Census of Brandywine Hundred. In 1850, Jehu Chandler was still living in N-569, the dwelling associated with the blacksmith shop. Chandler lived with his wife Elizabeth Ann and their two children Rachel Ann (age 24) and William Y. Chandler, a

carpenter (age 20). Also living with the Chandlers' were Thomas Hinkson, a master blacksmith (age 21) and an apprentice blacksmith, Samuel Stewart (age 19).

Jehu Chandler (II) was also a blacksmith and operated the shop after he purchased it from his brother, John and after he sold it to James Fields. According to the 1850 Manufacturer's Census of Brandywine Hundred, Jehu Chandler had $250 in capital invested in real and personal estate in his blacksmith shop. In the year ending 1 June 1850, Chandler reported using 3 tons of iron valued at $300 and 225 bushels of coal valued at $62. The shop contained no machinery and employed 2 additional men, Thomas Hinkson and Samuel Stewart. Hickson and Stewart were employed at an average monthly wage of $40. In addition, Chandler reported that the shop produced $800 of "county work" as its annual product.

In 1853, James Field sold the house (N-569), the blacksmith shop and the 7 1/2 acre property to Chalkly Hatton for $1700 (NCD-7-86). Hatton, also a blacksmith, lived nearby in Chester County, Pennsylvania at the time and it is likely that the Chandlers were still occupying the site as tenants at least. Hatton then sold the entire property within the same week to John Chandler, who was probably still living in N-569, for $1800 (NCD B-7-303).

In 1880, Amor H. Chandler inherited a 1/3 interest in the blacksmith shop property from his father John Chandler at his death in 1880 (NCC Will G-2-78). At this time Amor H. owned the A. Chandler/Galbreth property across the road where he was a

butcher at the store and post office. In 1884, Amor H. Chandler purchased the other 2/3 interest in the property from John's other heirs Mary E. Pyle (widow) amd William T. and Mary Chandler (children).

Amor H. Chandler owned the property and all of the structures on it, including the blacksmith shop until 1888 when he sold it along with the store and post office property across the road to William S. Stokes. State directories for this period indicate that Amor H. was operating the blacksmith shop through tenants. From 1872 until at least 1880, Jehu C. Chandler is listed as the only blacksmith in Beaver Valley and was undoubtedly operating out of the blacksmith shop. In 1882, his nephew, Amor H. is listed as a butcher and owner of the general store and post office across the road. In the 1882 state directory, however, Jehu C. is replaced as the only blacksmith listed by a man named Haggerty. Haggerty did not own property in the area and was probably operating the blacksmith shop, now owned by Amor H. Chandler, as a tenant.

Two other tenant blacksmiths, Granville Rawlings and a man named Pennington, are indicated in the 1888 state directory for Beaver Valley. These two blacksmiths are listed with a third man, Theodore Pyle, a wheelwright. This is consistent with Beer's 1868 atlas that shows the structure as wheelwright and blacksmith shop (Figure 12).

The next blacksmith listed in the state directories for Beaver Valley is John Gilpin Highfield, who first appears in 1891. Elizabeth Highfield, Gilpin's wife, purchased the shop

and property in 1889 for $1800 from Lewis Adair (NCD T-14-268). Adair lived in Wilmington and had purchased the property only two months before from William S. Stokes for $1750 (NCD R-14-195). Stokes, another Wilmington resident, had purchased the property only 8 months before in August 1888 from Amor H. Chandler for $6000 (NCD G-14-383). These deed transactions from Amor H. Chandler to Elizabeth Chandler are summarized in Table 10.

Gilpin Highfield operated the blacksmith shop and lived in the associated stone house, N-569, until his wife Elizabeth's death in 1926. One informant, Mr. Albert Mayer, whose father L. A. Mayer was then operating Sunnydale paper mill, remembers that Highfield and his blacksmith shop provided a number of services for the mill. Upon her death, Elizabeth Highfield left the property to her children Eva Moore, William J. and John G. Highfield (Jr.) (NCC Will A-5-434). There is evidence that John G. (Jr.) may also have been a blacksmith, but there is no evidence that the shop continued to be operated commercially after 1926.

After a series of transactions between the heirs of Elizabeth Highfield, her trustee William Potter and a third party, Paul Leahy, John Gilpin Highfield eventually gained control of the entire property by 1930 (NCD R-34-329 to NCD A-37-392, Table 10). Upon his death in 1938, J. G. Highfield left the blacksmith shop and entire property to his wife Alice G. Highfield. A little over 4 months later, in March 1939, Alice Highfield sold the property to the present owners, Woodlawn Trustees.

According to informants, the blacksmith shop was still standing as late as the winter of 1926 after Elizabeth Highfield's death. It is likely that the structure was destroyed some time by the mid-1930s when informants remember a multiple car garage on the site of the old shop. According to local tradition, the blacksmith shop had a dirt floor. By 1940, after the property was purchased by Woodlawn Trustees, the blacksmith shop was definitely no longer standing and the site capped by a 44 X 24 feet concrete pad used for the garage and that still exists today (Figure 29). This pad is approximately 30 feet outside of the proposed ROW.

Phase II Survey--The Phase I Survey located one feature, an area of disturbed stone and mortar in Test Unit S52W0. This feature, probably the remains of part of a foundation, was located along the southern edge of a large micaceous cap associated with the demolition of the blacksmith shop and attached frame stable. Informants and background research located the frame stable along the northern and eastern edge of the shop, the portion of the site partially within the proposed ROW and partially exposed during the Phase I survey. The concrete pad, the probable location of the blacksmith shop itself is approximately 12 feet southwest of the portion of disturbed foundation located in S52W0, and 30 feet out of the ROW. It is therefore likely that the disturbed stone and mortar foundation rubble located in Test Unit S52W0 is associated with part of the attached frame stable. This assumption was supported by later Phase II testing.

A total of 19 additional test units and 34 shovel tests were excavated during the Phase II survey of the J. Chandler/Highfield

site. These Phase II test units exposed an area of approximately 180 square feet around the disturbed foundation and micaceous cap just under the humus located by the Phase I survey. Three test units were then excavated north and south of the disturbed foundation and micaceous cap along the proposed ROW to determine the extent of the disturbance to the site sustained during the demolition of the blacksmith shop and the erection of a multi-car garage on the site in the 1930s. A grid of 34 shovel tests were then excavated to sample the yard area, locate diagnostic artifact patterns and other features, and determine site limits. These Phase II excavations determined the site to be small, significantly disturbed, and not potentially eligible for listing on the National Register of Historic Places.

The disturbed stone and mortar foundation and micaceous cap as exposed by all Phase I and II excavations are shown in Figure 62. The western, northern, and southern edges of the micaceous cap was completely exposed. Surrounding the cap, and underneath it, was a thick layer of coarse coal cinders and coal ash. This layer, along with the micaceous cap was deposited as fill. To test for more of the disturbed stone and mortar feature located south of the micaceous cap, a series of five test units were excavated across the micaceous cap. A profile of the north wall of Test Units N57W3-N57E9 showing the stratigraphy of the micaceous cap and underlying fill levels is shown in Figure 63 and Plate 18.

As can be seen in Figure 63, the micaceous cap (Level III) was found to extend at least as far east as the large boulders

FIGURE 62

Extent of Micaceous Cap as Exposed by Phase I and II Excavations, J. Chandler/Highfield Blacksmith Shop

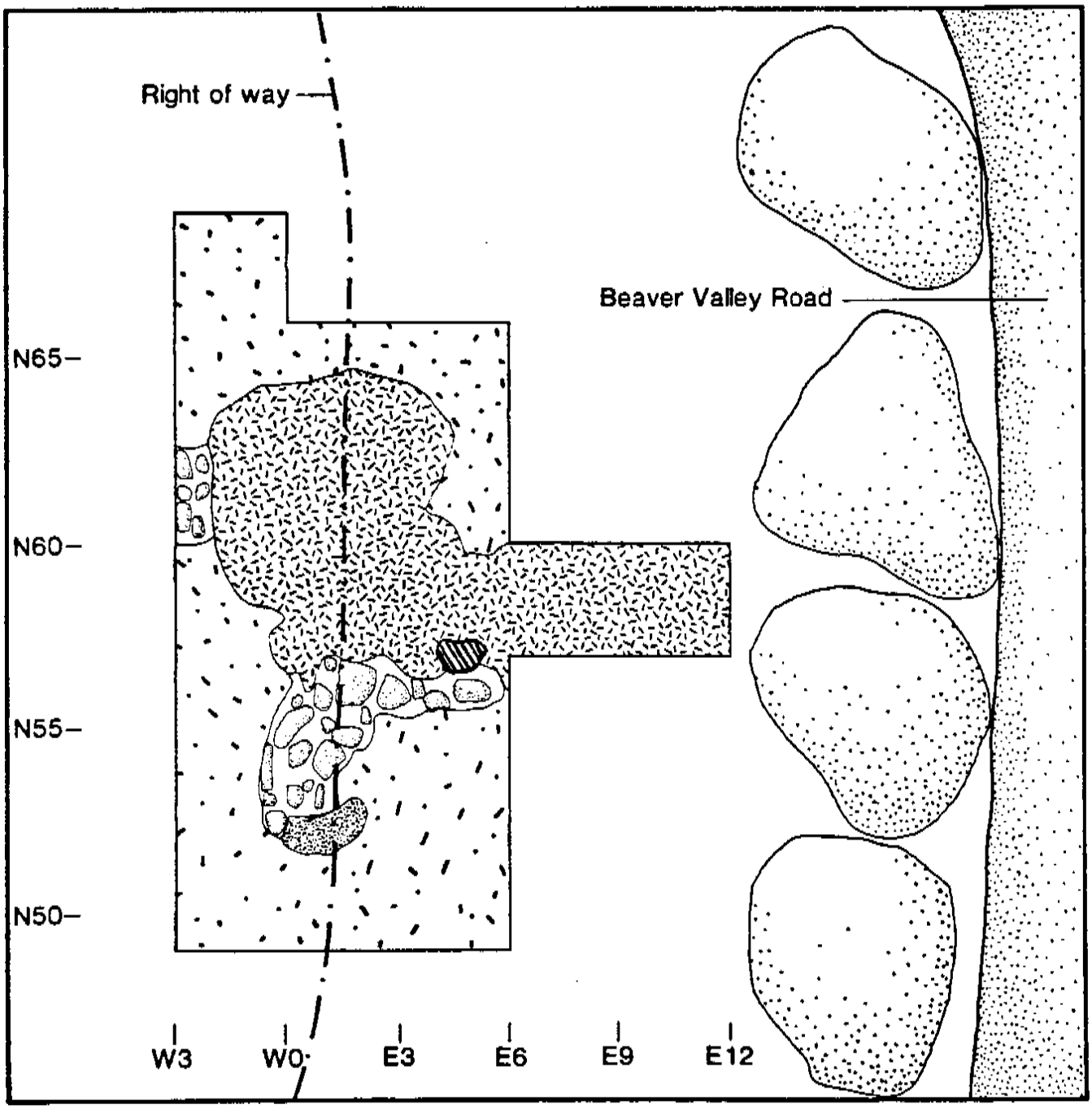
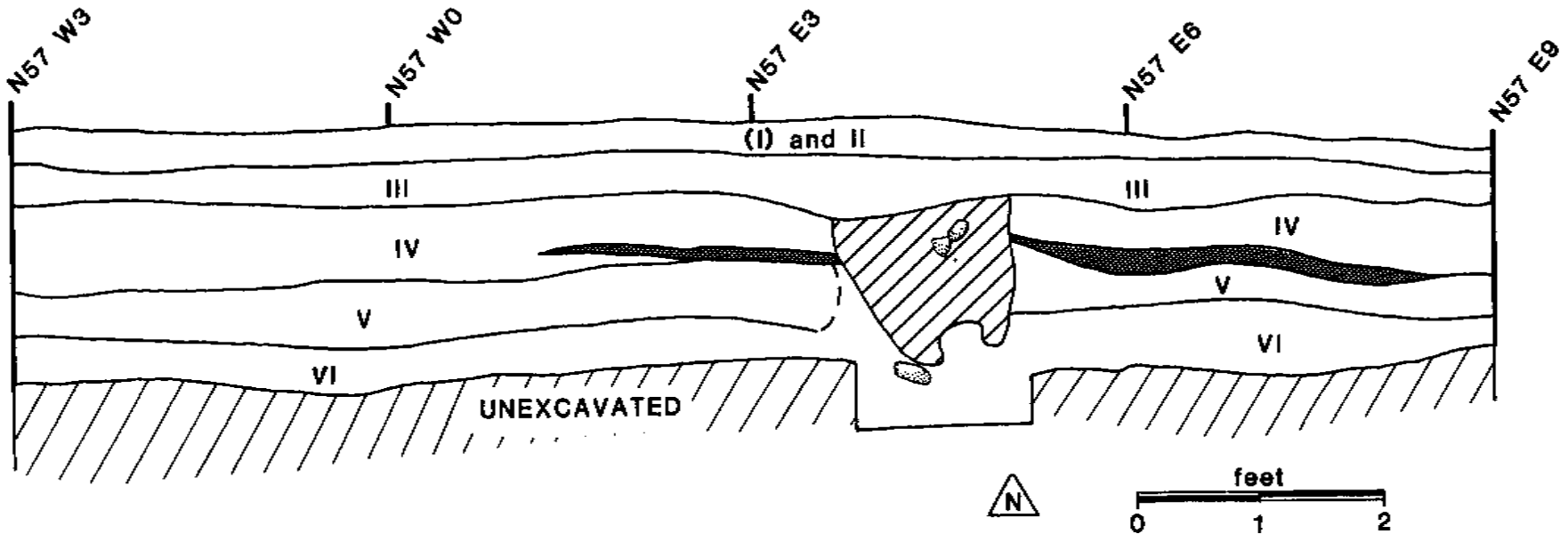


FIGURE 63

Profile of the North Wall of Test Units N57 W3–N57 E9
J. Chandler/Highfield Blacksmith Shop



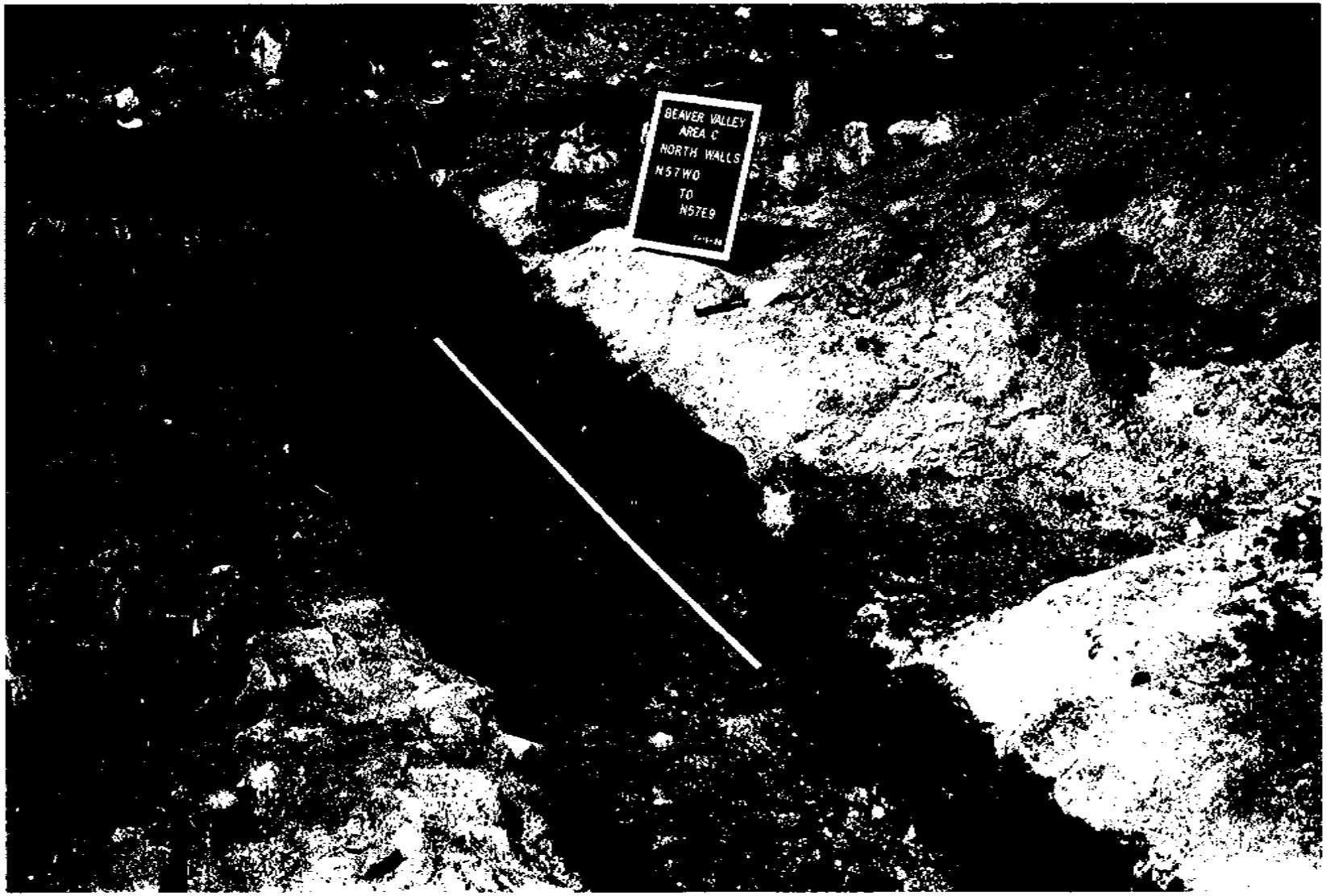
Soil Key

- Rock
- Charcoal and coal ash
- Feature C-5. Dark grey-black silty sand. Abundant charcoal, fragments up to two inches in diameter. Few historic artifacts, including two pieces of late nineteenth century whiteware

I Humus removed
II Dirt and cinder fill
III Micaceous cap
IV Medium to dark brown silty loam
V Medium brown mottled silty clay
VI Mottled yellow-orange silty clay

PLATE 18

Profile of the North Wall of Test Units N57 W0 - N57 E9, J. Chandler/Highfield Blacksmith Shop, (N-569.1, 7NC-B-18)



placed along Beaver Valley Road. The cap was located just below the humus. The humus was only moderately organic and composed primarily of dark brown silt and coal ash and cinders. This micaceous cap appears as Feature C-2 in Plate 19. The cap itself was observed to be 0.3-0.45 feet thick and from approximately 0.25-0.70 feet below surface. Part of the cap was screened, and found to contain very few historic artifacts. Indeed, the only historic artifacts recovered from the micaceous cap in any of the Phase I or II excavations were a few small, heavily damaged and relatively non-diagnostic whiteware, window glass and wire nail fragments.

Beneath the micaceous cap was a relatively uniform level of medium to dark brown silt loam from approximately 0.7-1.1 feet below surface (Level IV, Figure 63). This level contained numerous historic artifacts, particularly structurally-related wire nails and nail fragments, window glass fragments, and unidentified, heavily corroded iron fragments. A total of 65 mid-to-late nineteenth century historic ceramic fragments were also recovered of which most (59%) were utilitarian and refined redwares and whitewares (22%). The remaining 13 historic ceramics recovered from N57W3-N57E9 were pearlwares (8), creamwares (3) and one fragment each of yellowware and stoneware. All of these ceramics were small and the vast majority (approximately 95%) were relatively non-diagnostic body sherds. Level IV also contained the only pre-historic artifact recovered in the J. Chandler/Highfield Site--a small, heavily re-used Woodland I jasper stemmed point. This point is a spot find and does not represent any known intact prehistoric site.

PLATE 19

Micaceous Cap (Feature C-2), Exposed by Phase I and II Excavations, J. Chandler/Highfield Blacksmith Shop

One feature was located in test units N57W3-N57E9. This feature, a large postmold was first located while trowelling the surface of Level IV in Test Unit N57E3 and was labelled Feature C-5. A profile of this feature appears in Figure 63. Feature C-5 also appears in Plate 20. Besides the micaceous cap and disturbed stone and mortar foundation to the south, this was the only other feature located in the J. Chandler/Highfield site. Upon excavation of the entire trench, Feature C-5 was observed to penetrate the two strata (Levels V and VI) beneath Level IV (Figure 63). Also associated with Feature C-5 were two thin horizons of dark gray-black coal ash on either side of the feature (Figure 63). These lenses were similar in charcoal content to the homogeneous very dark brown silt feature fill found within Feature C-5.

Along either side of Feature C-5 and beneath Level IV, two additional strata were identified. These two additional strata appear as Levels V and VI in Figure 63. Upon further excavation, Feature C-5 was observed to penetrate both levels, the deepest of which Level VI, was culturally sterile. Level IV, a thick layer of mottled medium brown silt clay was located from 1.3-1.6 feet below surface. This level contained even fewer artifacts than Level IV. Only 32 total artifacts from five 3 X 3 ft test units were recovered from Level V. Of these 32 total artifacts almost all (21 or 66%) were structurally-related window glass and wire nail fragments. The remaining 11 artifacts were 9 small, unidentified iron fragments, probably nail fragments and 2 late nineteenth century, relatively non-diagnostic ceramic body sherds, 1 whiteware and 1 redware. The types and relative

PLATE 20

Profile of Feature C-5, Test Unit N57 E3, J. Chandler/Highfield Blackmsith Shop

distribution of artifacts in Level V is similar to that seen in Level IV.

Below Level V, a horizon of mottled yellow-orange clay was encountered from 1.7-2.5 feet below surface. This mottled clay horizon appears in Figure 63 as Level VI. This layer quickly graded from a fine silt clay in the 0.2 feet of the level to an almost pure clay below that until the deepest limit of excavation at 2.5 feet below surface. Very few historic artifacts were recovered from the uppermost silty part of the level. From 1.9-2.5 feet below surface, 11 of the test units were sterile.

Upon complete excavation, Feature C-5 was found to contain only 4 historic artifacts: 2 pieces of utilitarian lead glazed earthenware, 2 sherds of late nineteenth century whiteware fragments including one cup rim and 1 heavily corroded wire nail fragment. A number of large (up to 2 inches in diameter) pieces of charcoal and 2 small rocks were recovered from within the feature. A third small rock was located below the bottom of the feature in the mottled yellow-orange sterile clay below it.

Feature C-5 is located approximately 27 feet from the northeast corner of the concrete pad and is located along the same east-west orientation. As the postmold of a relatively large post, this location suggests that Feature C-5 was probably part of the attached frame stable located on the side of the blacksmith shop by informants and deed research. The diameter of Feature C-5 indicates a post of at least 1.5 feet in diameter. That Feature C-5 is associated with the corner of the attached stables is also supported by its relationship to the concrete

pad, the location of the main part of the blacksmith shop as established by informants and background research.

As no other features were located by Test Units N57W3 to N57E9, additional portions of the micaceous cap were removed and the dark brown silt (Level IV, Figure 63) was exposed. Isolated packets of this artifact rich dark brown silt were located but were heavily disturbed by recent fill episodes, most notably a thick layer of coal cinders, ash, and slag deposited during the construction and later removal of a multi-car garage on the concrete slab and the driveway leading to it from Beaver Valley Road.

A number of historic iron artifacts, however, were recovered from the isolated pockets of brown silt and cinder fill under the micaceous cap. Although in disturbed contexts, these artifacts probably relate to the occupation of the blacksmith shop, at least in its later Highfield occupation. These artifacts, specifically fragments of two drawknives, numerous horseshoes, and a possible millstone dressing hammer (Sloane 1964:85), however, are shown in Plates 21 and 22.

Two transects of 8 shovel tests each were then excavated along the eastern edge of the concrete pad to identify the degree of disturbance sustained upon the destruction of the blacksmith shop, the laying of the concrete pad and the erection and removal of the multi-car garage on the site. Simultaneously, a grid of 18 shovel tests was excavated north of the concrete pad to define the limits of the site and to locate additional features. The location of all 26 Phase II shovel tests excavated at the J.

PLATE 21

Historic Artifacts, J. Chandler/Highfield Blacksmith Shop

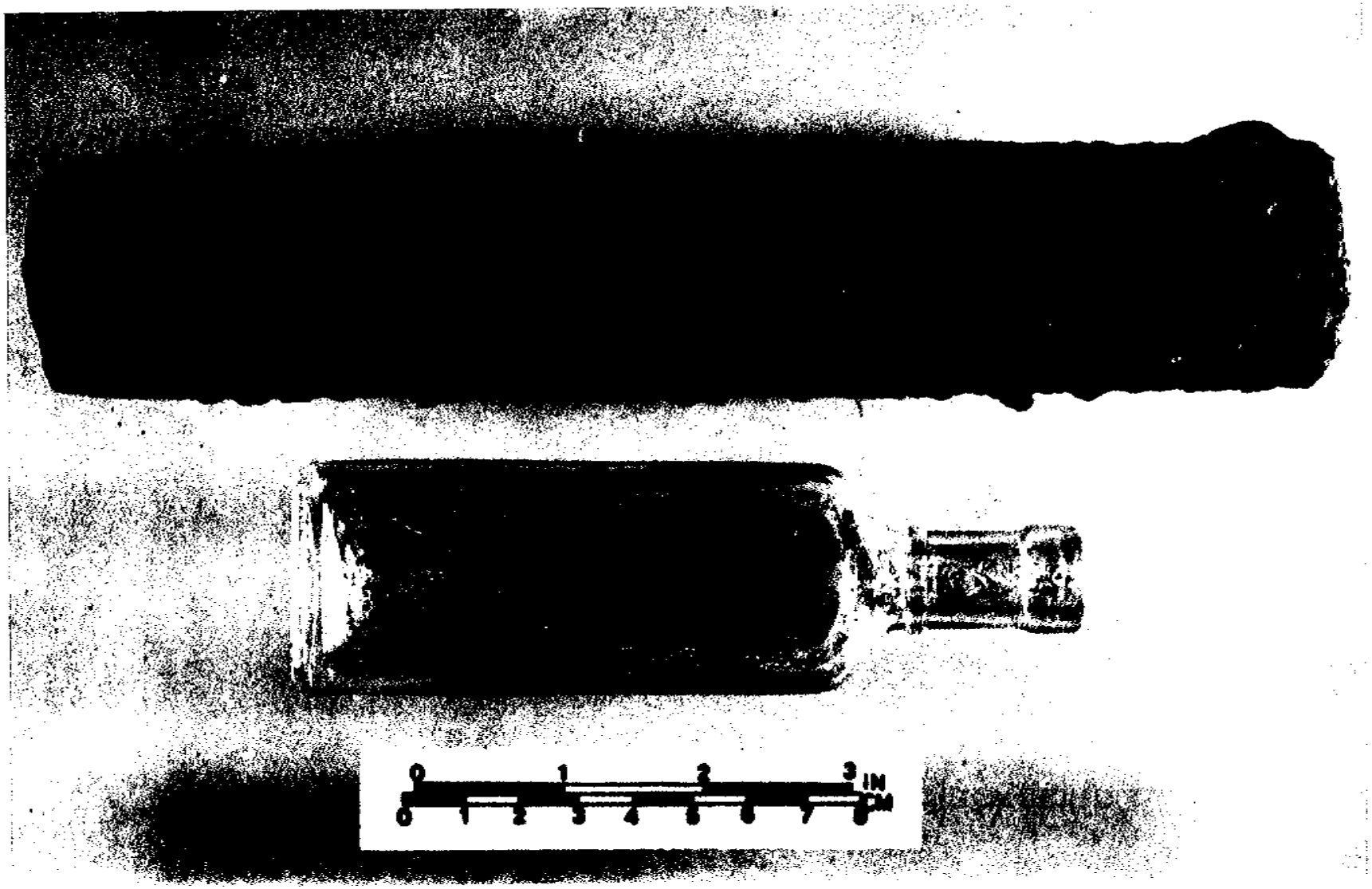


PLATE 22

Historic Artifacts, J. Chandler/Highfield Blacksmith Shop

Chandler/Highfield site is shown along with the total number of artifacts recovered from each in Figure 64.

No additional features were located by the 26 additional Phase II shovel tests. Areas of significant disturbance were located by Shovel Tests N15W6-N95W6 and N10W12-N100W12 directly east of the concrete pad towards Beaver Valley Road. This disturbed area is probably associated with the grading of a driveway to the garage built on the concrete pad in the 1930s.

The distribution of total historic artifacts and total structurally-related historic artifacts in each of the Phase II shovel tests excavated at the J. Chandler/Highfield site are shown in Figures 64 and 65 respectively. One concentration of structurally-related artifacts between the concrete pad and the micaceous cap was located and is no doubt associated with the blacksmith shop and/or 1930s garage at the location.

The distribution of whiteware and ironstone (Figure 66), and redware (Figure 67) in all of the Phase II shovel tests at the site show similar concentrations between the northeast corner of the pad and the micaceous cap. No pearlwares, creamwares, or other earlier ceramics were found in any of the Phase II shovel tests. Indeed no diagnostic artifacts from earlier than the mid-to-late nineteenth century were found over the entire site.

As can be seen in Figure 64, the number of artifacts decreases sharply north and west of the concrete pad. All of the artifacts recovered from the W39, W29, and W19 transects were small, heavily eroded, and probably deposited as slope wash from the yard areas of N-569 to the northwest. The stratigraphy of the area north and west of the concrete pad also indicated

FIGURE 64

Location and Total Historic Artifacts by Phase I and II Shovel Test, J. Chandler/Highfield Blacksmith Shop

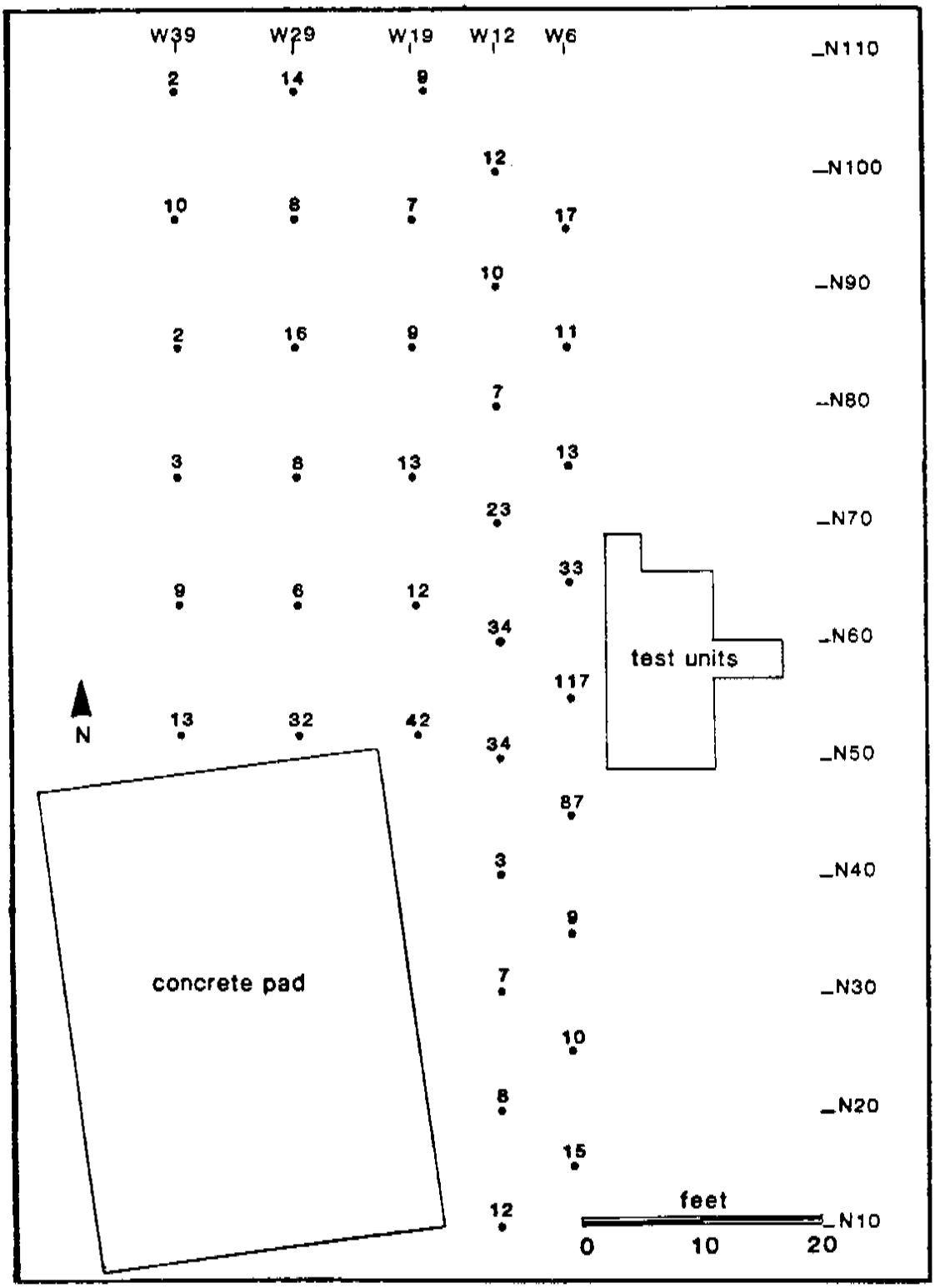


FIGURE 65

Total Structurally-Related Historic Artifacts by Phase II Shovel Testing, J. Chandler/Highfield Blacksmith Shop

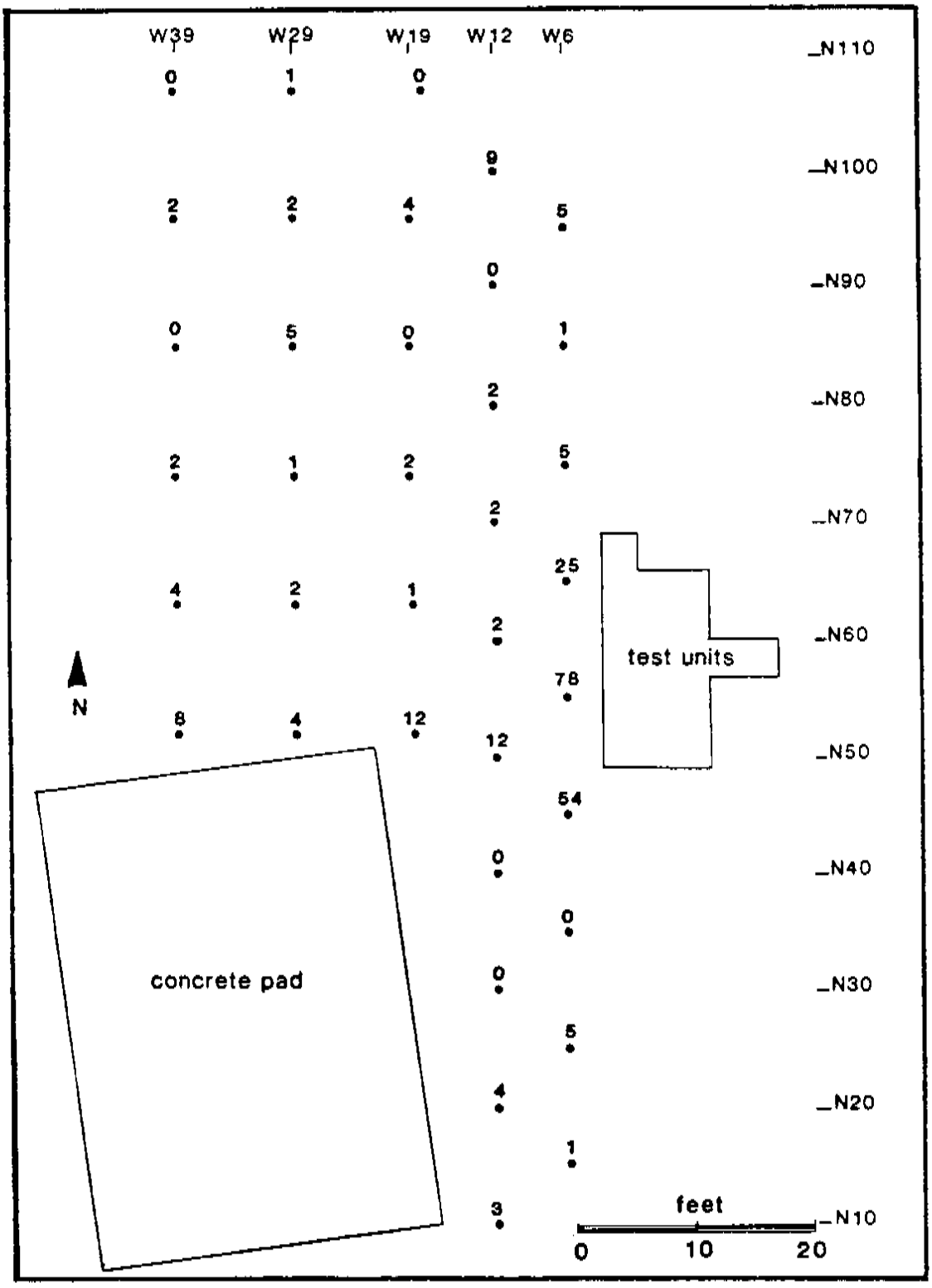


FIGURE 66

Total Whiteware and Ironstone Artifacts by Phase II Shovel Testing, J. Chandler/Highfield Blacksmith Shop

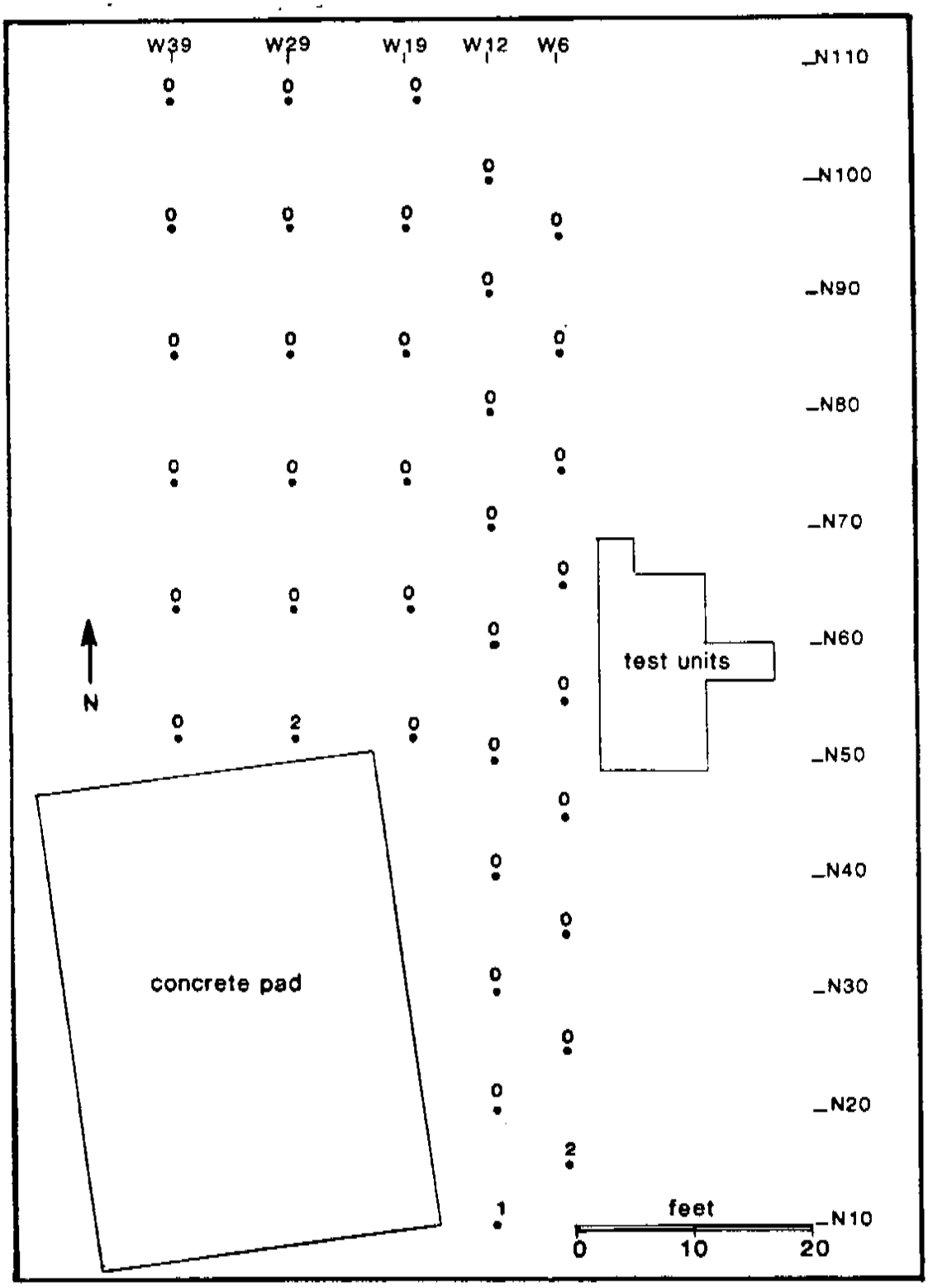
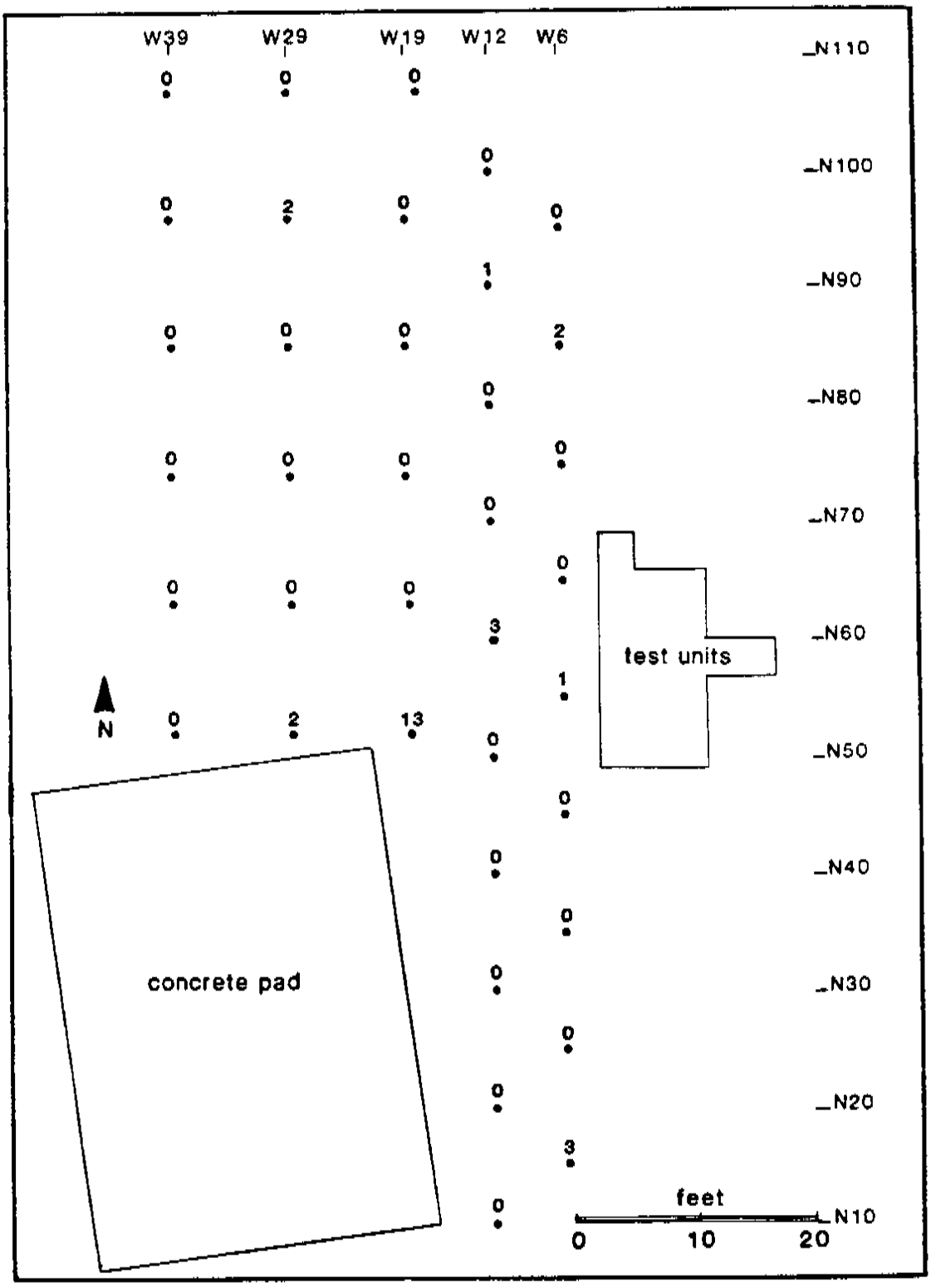


FIGURE 67

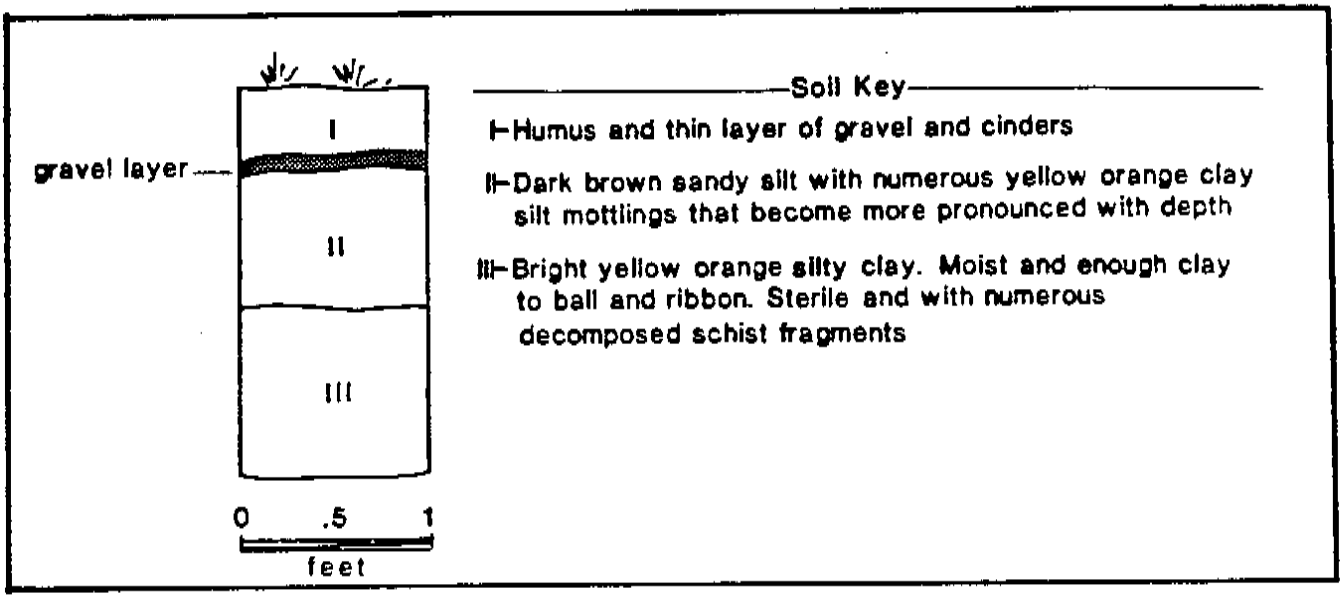
Total Redware Artifacts by Phase II Shovel Testing, J. Chandler/Highfield Blacksmith Shop



significant colluvial deposit. A typical stratigraphic sequence in the area can be seen in the profile of Shovel Test N96W29 shown in Figure 68.

FIGURE 68

Profile of Shovel Test N96 W29, J. Chandler/Highfield Blacksmith Shop



Sterile soils were consistently encountered in the northernmost part of the J. Chandler/Highfield site at approximately 1.2 feet below surface until the limit of excavation at approximately 2.2 feet below surface. This sterile level was composed of a bright yellow-orange silt clay with abundant decomposed schist fragments and appears in Figure 68 as Level III. Overlying this sterile layer was a thick layer of dark brown sandy silt with numerous yellow-orange clay mottlings that tended to increase with depth from 0.45-1.2 feet below surface (Level II, Figure 68). A few historic artifacts, all of which were small and badly eroded, were generally found in the upper portions of this strata and the thick humus above it.

The excavation of these 36 Phase II shovel tests completed the Phase II survey of the J. Chandler/Highfield site. Both of the major components of the site were determined not to be eligible for nomination to the National Register of Historic Places under any criteria. Evidence of stratigraphic disturbance caused by the destruction of the blacksmith shop and the construction of a multi-car garage and driveway on the site was seen in the deepest cultural levels. Only one partially intact structural feature, a single post mold (Feature C-5) was located and completely excavated. In addition, it is likely that this feature was associated with the attached stables and not with the blacksmith shop itself. No activity related features or other non-structural deposits of artifacts were located in either component. No builder's trench or other sealed deposits, even under the micaceous cap, were located. No evidence of a privy was located by testing or background research, including informants. In addition, the site was small in size and the majority of it excavated during the Phase II Survey. Given these factors, no further work is recommended.

INTERPRETATION AND CONCLUSIONS

IMPLICATIONS FOR REGIONAL PREHISTORY

The implications of this project for the prehistory of the region are based entirely on negative evidence, as no prehistoric sites were located. According to previous predictive models (Custer and Wallace 1982; Custer and DeSantis 1986), prehistoric sites in the Piedmont Uplands are not expected to survive in high

energy, significantly eroded areas. This model proved valid for the project area.

Although the project area is near Beaver Valley Rockshelter, a known prehistoric site with Woodland I and II components, no intact prehistoric sites were located. Three spot finds in disturbed contexts consisting of a 3/4 grooved axe, a jasper stemmed point and a quartz stemmed point medial fragment, however, were found. These artifacts represent isolated spot finds, and because of the disturbed contexts, are not significant.

IMPLICATIONS FOR REGIONAL HISTORY

The historical and archaeological investigations completed by this project have a number of useful implications for future historical archaeological projects in the region. Presented below are a number of observations relating to the historic development of this area from which research questions for later investigations could be generated. These observations include local and regional economic patterns, historic settlement and community patterns, inheritance patterns, and intersite comparisons.

First of all, the rapid growth, and equally rapid decline of the Beaver Valley community in the nineteenth century is an example of the tremendous impact of fluctuations in the local and regional economy of northern New Castle County on individual settlements. Beginning in the early nineteenth century and lasting until the third quarter of the century, Beaver Valley was a small, but thriving agricultural community built up around the

few mills operating in the area. These mills were largely "one-man" operations sensitive to local and regional economic conditions. These mills, in part because they were small and demanded relatively little capital to operate, changed their product and sources of power frequently in response to local and regional demand. What was a clover mill one year was a woolen mill or Turkish carpet mill the next. Sunnydale paper mill the largest of the mills in the Beaver Valley area, began as a woolen mill and changed its source of power from water to steam and then to a combination of both. But these "advantages" were also disadvantages--individual mills had little to fall back on in times of low demand or catastrophe and tended to close almost as fast as they opened. These mills in Beaver Valley fit the pattern of rural manufacturing identified by Lemon (1972) for the area and provide data on the role of rural industry within the spheres of the two large industrial areas of the region, Philadelphia and Wilmington.

From the first survey of Beaver Valley Road in 1751, farmers in the area looked toward the opportunities of Wilmington and Philadelphia. This is the second regional implication of the project--the impact of the development of a regional road network in northern New Castle County in the eighteenth and nineteenth centuries on the development of a specific community. The completion of Beaver Valley Road by the end of the eighteenth century had a significant impact upon the area. The very purpose of the road was to create access to Wilmington and Philadelphia via Naaman's Creek and West Chester via the Concord Pike. With access to these urban markets and economic centers, farmers in

the Beaver Valley area prospered throughout the eighteenth and nineteenth centuries. William Hicklen, Amor Chandler and their sons were all able to amass considerable wealth and leave considerable amounts of property to their heirs.

The history of the Beaver Valley project area seems to be largely the history of individual families--particularly the Chandlers. During the first three quarters of the nineteenth century, Beaver Valley was indeed aptly described as "Chandlers' Hollow". Documentary research on the store, blacksmith shop, and tenant and owner-occupied dwellings shows an intricate and complex series of familial relationships. Between the Chandlers, the unmarried daughters of Amor Chandler (Sr.) were carefully provided for by their father and two brothers, Jehu and Amor. And it is land that is the basic family "currency" and the definition of security and wealth. At the death of Amor Chandler (Sr.) in 1813 and the eldest daughter Rachel in 1838, a complex series of land transactions involving minute fractions and shares of parcels were set off. At least four of the Chandlers, Jehu, Amor (Sr.), Amor (Jr.) and Rachel died intestate, yet no record of any disputes, particularly Orphan's Court proceedings, are evident.

The importance of kinship and familial ties in the Beaver Valley community is similar to that identified by Catts et al. (1986) in the northern Route 7 area and provides an interesting comparison. In a study of 113 deed transactions for properties along Limestone Road in the eighteenth and nineteenth centuries, Catts found that in over 70% of the records the buyers recorded

were residents of Mill Creek Hundred, or were purchasing land from relatives (based on surnames). This can be compared to the Chandler family which retained control of almost all of the project area until the late nineteenth century.

The overwhelming importance of land and familial-community patterns in the history of the Beaver Valley area has a number of important regional historical and archaeological implications. First, with most of their wealth expressed in land, agricultural products, and shops, the Chandlers dealt primarily in "goods" that left little material evidence in the form of ceramics and other traditional archaeological evidence. Rachel Chandler's inventory of goods at her death in 1838 is one example of this, she controlled almost $1400 in land, livestock, bank notes, and agricultural products, but owned only $4.00 worth of ceramics, usually the most common historic artifact associated with archaeological determinations of socio-economic status.

This disparity between evidence of social and economic status points toward the need for detailed archival, particularly deed, research and the formation of archaeologically testable hypotheses that include data from other material culture and archival sources. The utility of this approach has been demonstrated in a number of other archaeological investigations, notably Coleman et al. (1984, 1985, 1987), and Catts et al. (1986).

The Beaver Valley area was a small, but thriving community throughout most of the nineteenth century. Archaeological and documentary data gathered during this project can also be used to compare community development in Beaver Valley with other

communities that grew up around similar agricultural manufacturing and transportation points. Examples of other such communities is that identified along northern Route 7 (Catts 1986) and at Fork Branch/Dupont Station (Heite and Heite 1985). The blacksmith shop and store/post office were at the center of the Beaver Valley community and can be compared to the artisan and commercial structures such as the Mermaid Tavern blacksmith and wheelwright shops along Route 7 (Catts et al. 1986) and the John Ruth site in Ogletown (Coleman et al. 1987).

In conclusion, the archaeological and historical data gathered by this project has a number of significant implications for our understanding of the regional history of northern New Castle County, Delaware, and the mid-Atlantic region.

CULTURAL RESOURCE MANAGEMENT CONCLUSIONS

Table 11 lists all of the archaeological sites located and identified by Phase I and II testing in the project area. All of the sites require no further research because they are not

TABLE 11

SUMMARY OF ALL SITES LOCATED BY PROJECT

CRS #	Site # and Name	Status	Work Required
N569.1	7NC-B-18 J. Chandler/ Highfield Blacksmith Shop	Phase I/II testing completed	No Phase III required
N-10955	7NC-B-19 A. Chandler/ Galbreth Store and Post Office	Phase I/II testing completed	No Phase III required
N-11074	7NC-B-20 Sauber House Site	Phase I testing completed	No Phase II required

eligible for listing in the National Register of Historic Places. A short discussion of each of these sites is given below.

Approximately 85% of the A. Chandler/Galbreth site (N-10955, 7NC-B-19) is included in the proposed ROW. Almost all of the the first component, the nineteenth century store and post office structure built by Amor Chandler, is within the limits of construction. This component was extensively sampled during the Phase II survey and evidence of significant disturbance was located. The second component of the site, the early twentieth century house built by T. Galbreth, was also extensively tested during the Phase II survey and evidence of significant disturbance located. As with the A. Chandler component, no intact non-structural features were located. Both components were thereby determined not to be eligible for listing on the National Register of Historic Places under any criteria.

Approximately 30% of the J. Chandler/Highfield Blacksmith Shop site (N-569.1, 7NC-B-18) is included in the proposed ROW. Only the attached frame stables are within the limits of construction. This blacksmith shop is associated with standing structure N-569. This site was determined to be shallow and significantly disturbed. No activity-related or other non-structural features were located. Thus this site was determined not to be eligible for listing on the National Register under any criteria.

The third archaeological site located was the Sauber House site (N-11074, 7NC-B-20). This site is located along a narrow strip of floodplain along Beaver Creek and was determined by Phase I testing to be shallow and heavily disturbed.

Approximately 95% of the Sauber House site is within the proposed ROW and limit of construction. Phase I testing determined the site not to be eligible for listing on the National Register. No Phase II excavations were undertaken and no further research is suggested.

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APPENDIX I

TOTAL ARTIFACT COUNTS FROM PHASE I AND II EXCAVATIONS

	AREA A	AREA B	AREA C	AREA D
Ceramic				
redware	651	35	377	4
creamware	13	--	8	--
pearlware	143	1	11	--
whiteware	523	22	47	14
ironstone	34	7	5	--
yellowware	6	--	1	--
stoneware	8	2	8	--
tin-glazed	1	--	--	--
porcelain	22	1	5	--
pipe	28	--	17	--
unidentified	9	1	8	--
Glass				
window	1533	32	2607	1
bottle	776	21	1742	2
jar	1308	10	--	1
table	64	6	--	--
lamp	206	9	22	1
milkglass	77	10	3	1
unidentified	687	63	354	--
Architectural				
brick	295	40	460	11
glazed brick	6	1	--	--
nail				
wrought	3	--	--	--
cut	331	17	71	--
wire	117	17	2	--
staple	--	1	2	--
unidentified	1755	91	890	3
mortar	372	28	11	--
plaster	12	--	--	--
wood	99	1	3	1
unid. metal	1035	38	1604	2
Personal				
button	14	2	4	--
thimble	1	--	--	--
coin	1	--	--	--
ornament/toy	2	1	--	--

	AREA A	AREA B	AREA C	AREA D
Miscellaneous				
misc. metal	268.5	7	169	--
bone	213	6	3	--
shell	56	1	4	--
plastic	11	3	2	--
rubber	23	--	13	--
unid.	10	2	--	--
coal/cinders	197	59	50	--
mica	5	2	26	--
clinker/slag	56	--	107	--
lime	5	--	1	--
ammunition	12	--	6	--
leather	1	--	9	--
pop tops	--	--	5	--
prehistoric	3	--	1	--

APPENDIX II

INVENTORY OF THE GOODS OF RACHEL CHANDLER 28 JULY 1838

An Inventory of the Goods and Chattels of Rachael Chandler, Late of Brandywine Hundred in the County of New Castle in Delaware, 28 July 1838:

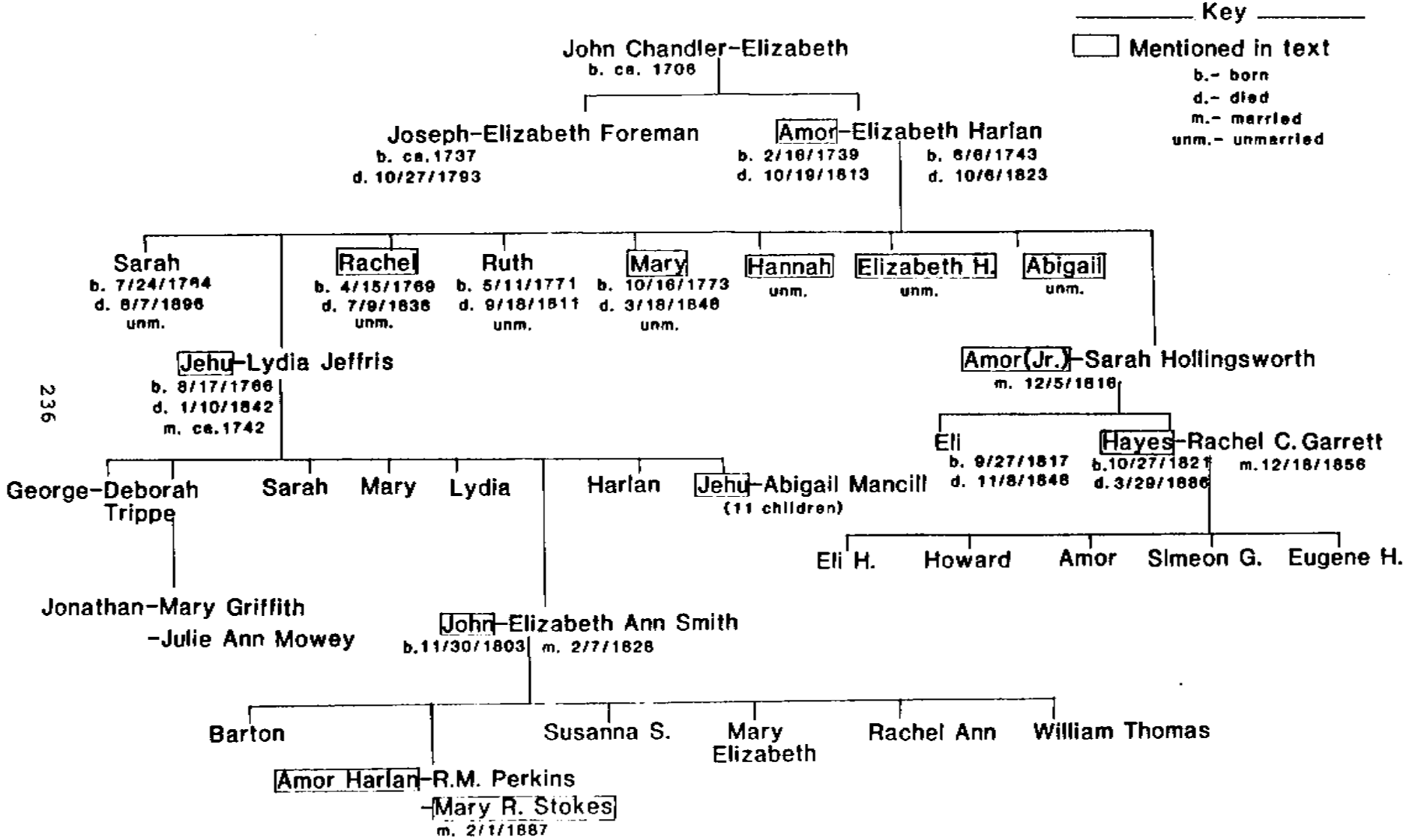
One half eagle and one ten dollar note	15.00
Six shares on the Bank of Chester County	300.00
One Portable writing desk	2.50
A pair of Mahogany [Heaureauvas] gloves	15.00
One Chi[vr]y	5.00
One bed bedstead sacken bottom	20.00
One counter pin	2.50
3 bed quilts	6.00
4 blankets	8.00
3 linen sheets	5.00
6p pillow cases	3.00
nine napkins	3.00
4 Dining Table Cloths	10.00
1 Breakfast do. do.	1.00
A set of bee curtains	4.00
A stem Table	.50
Looking glass upstairs [1.aa Too Houn 1-$2. 1-$1.00]	4.00
A 1/2 Dozen windsor chairs	3.50
do. do. do. do. downstairs	3.00
A [bee] bedsteads - downstairs	16.00
6 silver table spoons	16.00
5 tsps and sugar tongs	3.00
Silver cream jug	3.00
China teapots, cups, and saucers gilt white	1.00
do. cups, saucers and sugar bowl in blue	.75
One doz. China plates - gilt white	1.00
9 Delft plates blue	.75
2 Pitchers 1 @ .40; 1 @ .10	.50
China mug	.15
2Sauceboats	.12 1/2
3 Decanters	.50
A 1/2 gallon ornate green bottle	.25
A Breakfast table	1.50
Small chair and coffeepot of tin	.50
Brass kettle and tubs	2.00
Brass hand irons	2.00
Heavy hand iron "	1.50
Newton's work imperfect	2.00
Clarkson's on Quakerism 3 vol.	.75
Lot of Books	1.50
1/2 of riding chair	10.00
Remains old do.	3.00
1/2 hogshead brrl	.25
Hay $25 - oats = 75 hay fork box	26.00
Nos. axe	.37 1/2
2 Pigs	5.00
A Black Mare	15.00
Cow	15.00
1/2 of some corn and potatoes	1.00
Carpeting at .35 for yrds 3	10.50
2 armchairs windsor	1.25
Total	$553.15

Appraised by John Huey & Benj. Chandler
24 August 1839

APPENDIX III

SUMMARY OF CHANDLER FAMILY TREE 1706-1887

Summary of Chandler Family Tree 1706–1887



APPENDIX IV

NOTES ON SITE NUMBERS

NOTES ON SITE NUMBERS
(an example)

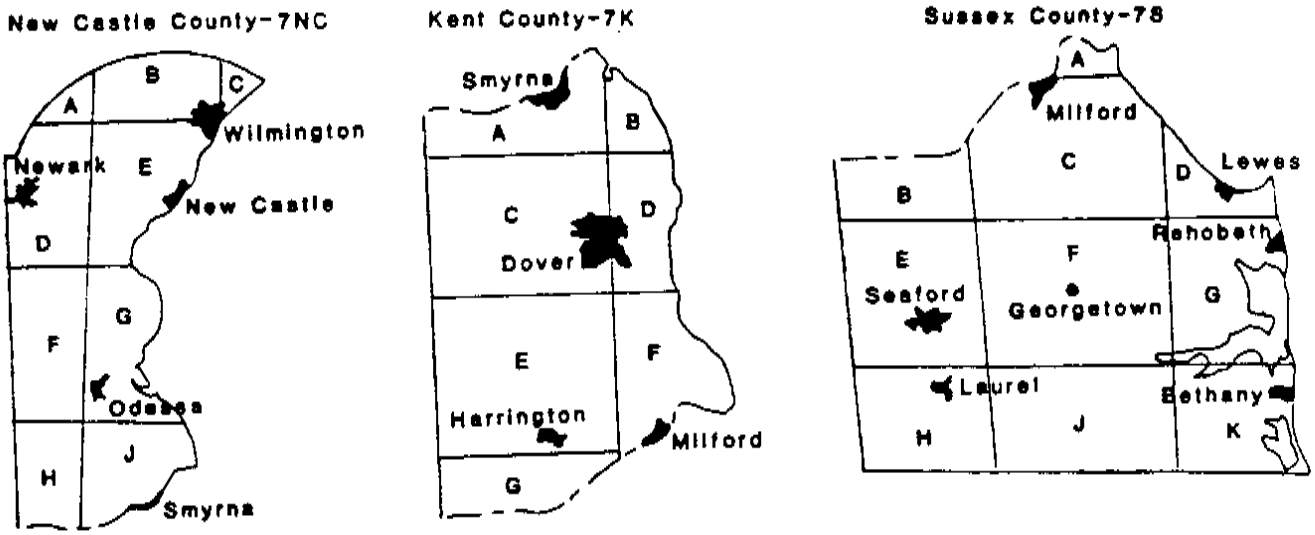
7NC-E-46(N-6264)

7NC-E-46

7NC-E-46	=	State Site Number
7	=	Numerical prefix identifying the state of Delaware.
NC	=	New Castle County; K = Kent County
E	=	Each county is divided into lettered divisions, letter E indicates the block in which the site is found in New Castle County, Delaware.
46	=	The 46th site recorded in block E, New Castle County Delaware.

N-6264

N-6264	=	Cultural Resource Survey Number
N	=	New Castle County, Delaware; K = Kent County
6264	=	The 6264th cultural resource inventoried in New Castle County. Each cultural resource number ties into the aerial photos and management files on repository with the Delaware Division of Historical and Cultural Affairs, Dover, Delaware and/or The Island Field Museum and Research Center, South Bowers, Delaware.



APPENDIX V

GLOSSARY

GLOSSARY

Aboriginal - Prehistoric peoples in North America.

Alluvium - Deposits of gravel, sand, and soil that are caused by flowing water.

Artifact - Any object shaped or modified by man, or as a result of human activity.

Archaeology - The study of the people of the past through the recovery and analysis of the artifacts they left behind.

Assemblage - The array of contemporary objects and associations found at an archaeological site.

Auger - A large tool for boring holes deep in the ground.

Basecamp - A prehistoric dwelling site for hunter-gatherers from which resource procurement forays are made.

Biface - A stone tool that has been flaked on both sides.

Bifurcate - The dominant projectile point (6500 B.C.) is a small point with a notched base.

Cache - A collection of artifacts and/or ecofacts which has been deliberately stored for future use.

Cobble - Frequent lithic tool resource for prehistoric peoples.

Core - A piece of stone from which other pieces of stone are flaked off to make artifacts.

Cortex - Weathered exterior of a piece of lithic material, may be either vein or water-worn cortex.

Cryptocrystalline - Indistinctly crystalline; having an indistinguishable crystalline structure.

Culture - The non-biological mechanism of human adaptation.

Debitage - Waste material from the manufacture of stone tools.

Detritus - Particles of rock or other material worn or broken away from a mass, as by the action of water or glacial ice; any disintegrated material; debris.

Diagnostic Artifacts - An artifact with specific temporal or cultural significance.

Direct Percussion - Part of the lithic reduction process, a percussor is directly applied to the worked material with a sharp blow.

Fallow Field - A plowed but not planted field.

Feature - Any soil disturbance or discoloration that reflects human activity. Also, an artifact that, being too large to remove from a site, normally is recorded only; for example, house, storage pits, etc.

Field Reconnaissance - The walking of a field to examine the surface for any artifacts, architectural remains, or obvious archaeological features.

Flake - A piece of waste material from the manufacture of stone tools, caused by percussion or pressure applied to the object by an external agent (e.g. hammerstone, antler pressure flaker); flake itself may be further utilized as a tool (see "Debitage").

Historic - The time period after the appearance of written records. In the New World, this generally refers to the time period after the beginning of European settlement at approximately 1600 A.D.

Holocene - The latest division of the Quarternary period, which commenced around 12,000 B.P.

Hundred - A subdivision of some English and American counties.

Inidrect Percussion - In the lithic reduction process, a punch is held against the worked material and the punch is struck a sharp blow with a percussor.

In Situ - In the original place.

Intestate - A person whodieswithout making a will.

Interface - A surface regarded as the common boundary of two bodies or spaces.

Lithic - Pertaining to or consisting of stone.

Loam - A loose soil composed of approximately equal parts clay, silt and sand, especially a kind containing organic matter and of great fertility.

Locus - A predicted archaeological site locality.

Macro-band Base Camp - For a hunter-gatherer society, an archaeological site one hectare or larger in area characterized by a wide variety of tool types, abundant ceramics, semi-subterranean house structures, storage pit features, and abundant debitage from tool manufacture and reduction.

Mega Fauna - A number of species of presently extinct mammals including mammoths and mastadons.

Mesic Forest - A vegetation pattern characterized by relatively wet-adapted plant species, such as oak and hemlock forests.

Micro-band - A component of macroband, perhaps one or two extended families, which periodically operates independently of the macroband group.

Orphans Court Records - The County Court responsible for the welfare of orphans when a father died without a will. Orphans Court watched over the estate until the children (if any) reached majority. A guardian was appointed by the Court, who was to make periodic returns of the estate to the Court. When the youngest heir came of age, then the property could be divided among the heirs. These court records are filled with information regarding income property, education, repairs of houses and outbuildings, contracts, and other useful material about eighteenth and nineteenth century life.

Pleistocene - A division of the geologic Quarternary Period, which began around 2.3 to 3 million years ago and is associated with rapid homonid evolution from Australipithicinae to Homo sapiens sapiens.

Plowzone - In a plowed field, the upper layer of organic soil which is continually reworked by the plow. In the Middle Atlantic region this is about 8-12 inches.

Posthole - A hole dug in the ground into which a post is placed.

Postmold - The organic stain in the ground which is left by a decayed wooden post. Postmold stain may occur inside of posthole stain on an archaeological site.

Prehistoric - The time period before the appearance of written records. In the New World this generally refers to indigenous, pre-Contact societies.

Probate - The official proving of a will as authentic or valid.

Projectile Point - Strictly speaking, a biface attached to the head of an airborne item of weaponry, like an arrow or a thrown dart; frequently used indiscriminately when referring to any biface.

Ranked Society - A society in which there is unequal access to the higher status categories; many people who are qualified for high status positions are unable to achieve them.

Sherd - A piece of broken pottery.

Slag - The byproduct of the incomplete combustion of coal, particularly soft coal. Commonly known as "clinkers".

Soil Horizon - Soils are divided in 3 horizons, which reflect different kinds of chemical and physical processes that have resulted from changing climatic conditions.

Stratigraphy - The examination of the soil layering on an archaeological site; the characteristics of each individual stratum and its relationship to others in the sequence is critical to understanding the temporal and spatial characteristics of the site.

Strata - The various layers of human or geological origin which comprise archaeological sites.

Subsurface - Below the surface, not visible from the surface.

Transect Sampling - A means of archaeological research design in which the sampling element is a square or rectangular grid.

Uniface - A stone tool that has been flaked only on one side.